

# Rising in the East

CONTEMPORARY NEW TOWNS IN ASIA

城市,让生活更美好  
Better City, Better Life

务实的城市 智慧的你

和您的城市一起成长

市新松江新篇

告

售楼处

International New Town Institute

2014

Rising in the East: Contemporary New Towns in Asia



# Rising in the East

CONTEMPORARY NEW TOWNS IN ASIA

Rachel Keeton

International New Town Institute

SUN

Author: Rachel Keeton

Introduction: Michelle Provoost and Wouter Vanstiphout

Editor in Chief: Michelle Provoost

Editorial Board: Wouter Vanstiphout, Harry den Hartog and Todd Reisz

Translation Introduction: Peter Mason

Copy editor: Dutton R. Hauhart

Production: Nico Buitendijk, Ton van Lierop, SUN

Graphic Design: Ewout Dorman, Gerard Hadders

Printing / binding: AD Druk, Zeist

Publisher: Martien de Vletter / SUN

Cover Illustration: Rachel Keeton

© SUN architecture publishers and authors, Amsterdam 2011

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic mechanical, photocopying, recording or otherwise, without the prior written permission of the Publisher.

For works of visual artists affiliated with a CISAC organization the copyrights have been settled with Pictoright in Amsterdam. © 2011, c/o Pictoright Amsterdam.

It was not possible to find all the copyright holders of the illustrations used. Interested parties are requested to contact Uitgeverij SUN, PO Box 15970, 1001 NL Amsterdam, the Netherlands, info@sunarchitecture.nl

Available through IDEA BOOKS, Nieuwe Herengracht 11, 1011 RK Amsterdam, The Netherlands, tel + 31 20 6226154, fax + 31 20 6209299, idea@ideabooks.nl

SUN architecture, based in Amsterdam, develops and publishes books on architecture, urban planning and landscape design. See: [www.sunarchitecture.nl](http://www.sunarchitecture.nl)

This publication was funded by the International New Town Institute (INTI) with generous support from the Netherlands Architecture Fund (SFA) and the EFL Foundation. INTI is funded by a grant from the Province of Flevoland and the Municipality of Almere.

ISBN: 978 9461 05 6832



Gemeente Almere



9 Introduction

by Michelle Provoost and Wouter Vanstiphout

45 Chapter 1: Eco-Cities: Green is the New Black

48 Masdar City, United Arab Emirates

72 Tianjin Eco-city, China

96 Zira Island, Azerbaijan

119 Chapter 2: Political Cities: Shifting Capitals and Manufacturing Identity

122 Naypyidaw, Myanmar

144 Astana, Kazakhstan

167 Chapter 3: Enclave Cities: To Withdraw like a Monk and Live like a Prince

170 The Blue City, Oman

190 Saadiyat Island, United Arab Emirates

210 CamKo City, Cambodia

235 Chapter 4: Economic Cities: Diversification in the Oil Age

238 Binh Duong New City, Vietnam

258 King Abdullah Economic City, Saudi Arabia

280 Magarpatta, India

303 Chapter 5: Hi-Tech Cities: Future Chic

306 New Songdo City, South Korea

332 Cyberjaya, Malaysia

351 Chapter 6: Shelter Cities: Enjoy the Commute

354 Songjiang New City, China

384 Tin Shui Wai, Hong Kong

404 Bumi Serpong Damai, Indonesia

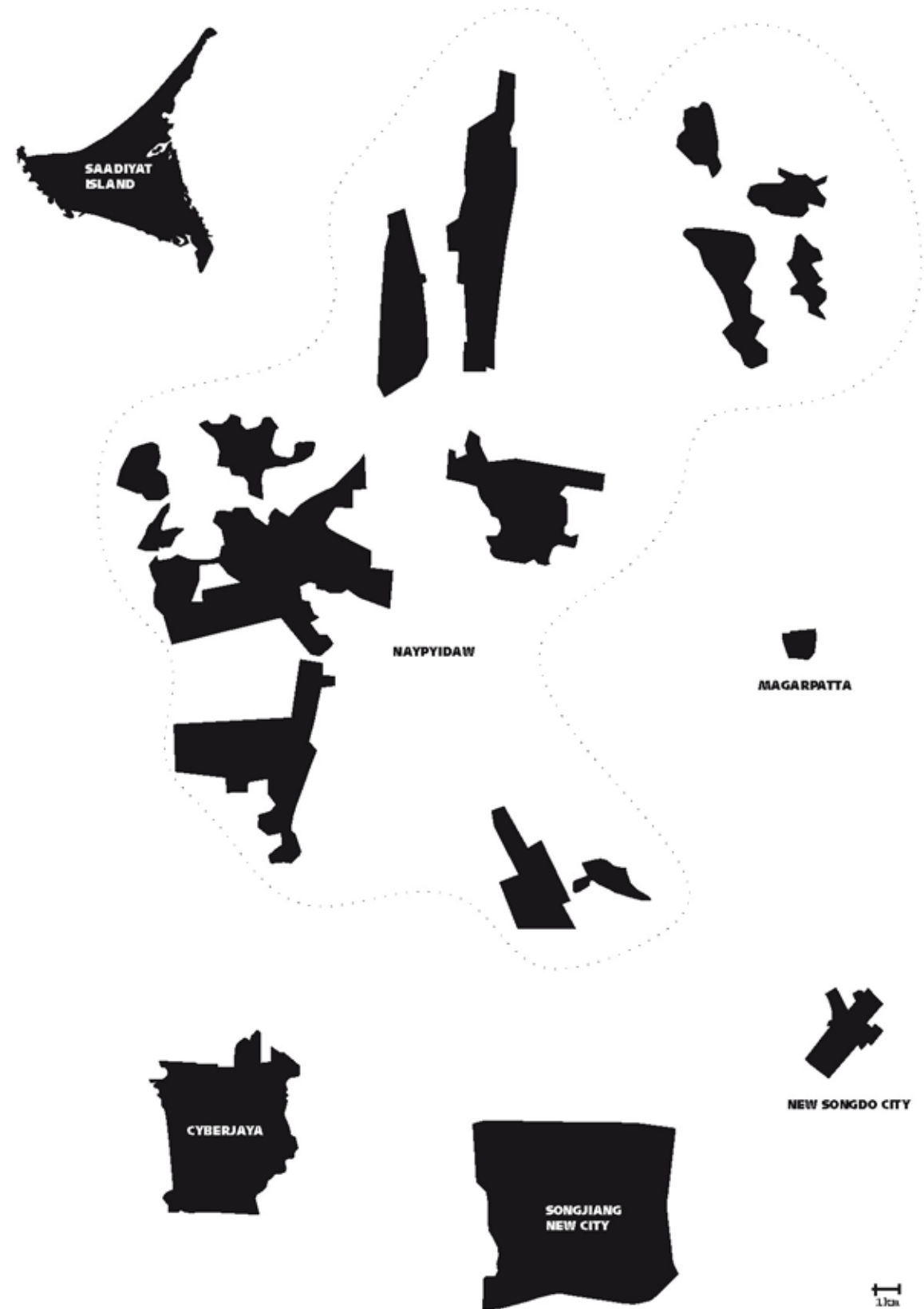
424 Suggested Reading

428 Image Sources

431 Acknowledgments

432 Authors





## Introduction

This is a book about the design of cities, not about the process of urbanization, nor even about the economy and technology of building cities. It is about the role of architecture and urban design in the genesis of an entirely new generation of new cities and New Towns that is being produced by the burgeoning economies and controversial politics of the Asian continent.

The International New Town Institute has taken up the challenge of researching this latest generation of new cities from a mixture of fascination and concern, not to promote the building of even more New Towns. And above all: to see just what the new city of the 21st century *is*, because—amazingly—there has been little research on this topic so far. Of course, with many of these cities still on the drawing boards, and others just barely inhabited, this is a difficult venture.

Moreover, this book is written with a full awareness of the distance between the West, where INTI is based, and the subject of study: the Asian continent. This is important to bear in mind, because the expectations we have and the criteria we apply in analyzing and criticizing New Towns are so clearly rooted in our own highly chequered and well documented planning history. Perhaps even more compelling is the fact that we in the West do not limit ourselves to analysis and criticism of the cities in the East, in fact, we also play an important role in designing them. This book presents many projects by architects and urban designers from Europe and the United States whose professional, cultural and ethical baggage is steeped in the Western tradition.

The most striking difference is that the design and construction of New Towns has become a historical phenomenon in the West, while in the East it is part of everyday practice and still has an enormous potential to change the built environment. This book, and in particular this introduction, is therefore written from an ambiguous position. On the one hand, we try to understand and to analyze the Asian New Towns on the basis of the present situation and of their specific geographical, economic and cultural contexts. On the other hand, it is inevitable that we will bring to bear our own Western experience with designing, building, populating, and even demolishing and restructuring New Towns, without being certain of how relevant our own experience may be for the challenge facing the various Asian countries today. Therefore this essay can be used both as





Winkelcentrum in Chongqing, China. Foto AFP

In s  
caar  
nal  
Mé  
uni  
kaar  
te  
Aux  
mo  
Zij  
ne  
zij  
een  
maa  
H  
twe  
de  
sch  
tot  
Am  
hij  
univ  
mes  
waar  
ress  
is  
heri  
luc  
een  
tig  
Be  
zijn

N  
Vl  
lan  
ma  
pr  
To  
tri  
ma  
de  
gr  
als  
vin  
sov  
An

an introduction to the dossiers brought together here, which present common themes, contexts and stories about the implementation of these towns, and as an exploration of the attitude that we Western specialists in architecture and urban design should adopt with regard to the rapid and sometimes astonishing developments on the Asian continent.

## Fascination

Our fascination with the Asian New Town is connected with the large numbers and the speed involved in their emergence. While few, if any, large-scale cities or urban extensions have been designed in the West in the last couple of decades, and the building process is characterized above all by sluggishness, it is with a mixture of jealousy and incredulity that we see one mega-masterplan after another presented in Asia. However, most of the publications in the planning and architecture press focus on the landmark buildings, the tallest tower block, the biggest museum, the most expensive housing or the most ecological district. It is an urbanism of competition, records to be broken, and superlative adjectives. But apart from those exceptional projects that attract so much attention, what are the true building blocks of these New Towns? Which concepts drive them forward? How many are there? Who will live there? How much money is involved, and whose property are they? Historians agree that the New Towns of the 20th century share DNA that was first strung together by Ebenezer Howard, but to what extent does this new generation have anything in common with the old? Are they really genetic manipulations of the original model of the Garden City?

After an initial inventory of the latest generation of New Towns, some four hundred of their descendants turned out to be situated in Asia and the Middle East. This is hardly surprising, given the natural connection between New Towns and economic growth. But besides our superficial fascination, a feeling of concern began to grow: are these hyper-commercial New Towns really the cities of tomorrow? Is it possible for a good city to arise from a plan that is based purely on economic and political considerations; one that incorporates few, if any, of the more recent insights and conceptual approaches used in the professional world of urban design?

It even looks as though these 21st century New Towns are falling back on many of the same principles that guided the Western New Towns fifty years ago: we see modernist masterplans with large building plots separated by wide motorways, while a strict zoning scheme determines whether these plots are to be filled with residential tower blocks, villas or offices. There is no combination of functions, there are no lively urban streetscapes, there is no small-scale building, there is no flexibility; there is a great uniformity of housing supply, except this time instead of subsidized rentals for workers we find commercially developed owner-occupied housing for the (upper) middle classes. The big question is: are the designers of these New Towns repeating the same mistakes that their Western colleagues made half a century ago?

## Urban era

It's widely known that from 2010 onward more than half of the world's population will live in cities; Ricky Burdett took this as the main point of his 2007 Venice Biennale, 'Cities: People, Society, Architecture'.<sup>1</sup> A follow-up question heard less often is how many of these citizens will live in an environment that we would actually *recognize* as being urban, not in the geographical or quantitative sense, but in the social, cultural or economic, or even in the architectural sense, of the city. Another question would be about the percentage of urban dwellers who actually live in an environment that has been *planned and designed* as a city, a town, a neighborhood, because probably a far greater amount of people live, or will live, in an urban environment that has not been planned by professionals at all, but has been organized by its inhabitants themselves: the Informal City, which is spreading across the global South. The UN estimates that by 2020 some 900 million people will live in slums and *favelas*; far more than in planned cities...<sup>2</sup>

The famous urban geographer Edward Soja, who has expanded our understanding of what a city can be with his studies of the urbanized suburbs of California, refers to the new American cities as *postmetropolises*—cities that are losing their urban bearings and are becoming no more than vast accumulations of suburbs, edge cities.<sup>3</sup> Soja's post-metropolis is a combination of postmodern and metropolis, a postmodern metropolis, an urban form determined by the dynamism of late capitalism. It is pulled apart and put together again, deterritorialized only to be re-territorialized again under the influence of such factors as what Soja calls 'the globalization of capital'. Soja also describes a city wherein the definition of what is urban and what is rural disappears completely. Moreover, Soja's city loses its specificity and centrality to become an endlessly expanding and extremely diverse cosmopolis: a city, unrecognizable as such, in which the whole world congregates. The ultimate postmetropolis is Los Angeles, but every city is heading in this direction; they are all moving towards the apocalyptic final stage of urbanism, in which nothing is what it seems to be nor where it appears to be. In other words, Soja's postmetropolis is a process in which the cities that we know lose their properties and contours and are metamorphosed into an entirely new condition.

At first sight there are several parallels between the recent Asian New Towns and Soja's postmetropolises. Does it make sense to discuss the results of the Asian urbanization in terms of Soja's model, or is the latter too heavily oriented towards the transformation of Western cities, and thus not universally applicable?

In the exploding Asian cities we might rather seek a *proto-metropolis*. Across Asia we see immense developments that are *not yet urban*, at least in any form that we might recognize, instead of *no longer urban*. These cities are still defined by the terrifying process of welcoming up to 10% of their population in the form of rural immigrants every few years, and by the no less catastrophic process of demolition and building, or vice

<sup>1</sup> Richard Burdett, Sarah Ichioka, 'Cities: People, Society, Architecture'. 10th International Architecture Exhibition, Venice Biennale, New York, 2006.

<sup>2</sup> <http://www.un.org/apps/news/story.asp?NewsID=34119&Cr=mdg&Cr1=&Kw1=slum+dwellers&Kw2=&Kw3=>, accessed 14 August 2011.

<sup>3</sup> Edward Soja, *Postmetropolis: Critical Studies of Cities and Regions*, Oxford, 2000.



4 Rem Koolhaas, "Generic City", in: OMA, Rem Koolhaas and Bruce Mau, S,M,L,XL, New York, 1995.

versa. At this point they are still amassing the inhabitants and the urban shape which will one day coalesce in a specific urban culture; one that is at this time in such a state of flux and transformation that it might be wiser to suspend any kind of analysis or definition. Whether it is a question of expanding cities with a long past, like Mumbai or Istanbul, or new cities, like Shenzhen, that still lack a clear identity of their own, the 'core' of the city is often so far away from the everyday lives of the new city folk that it hardly reflects the daily urban experience for the vast majority of its residents. So is the Asian New Town an anonymous sprawl of high-rise buildings and motorways; the generic city as described by Rem Koolhaas in 1995?<sup>4</sup> Yes, they might be generic, but like every other urban environment, they need time to become specific. Most of all, however, we need time to recognize them as being more than just spectacular accumulations of concrete and people.

These entirely planned New Towns are only a minority within the enormous diversity of new urban areas. However, an argument for devoting this book to their study is the question of whether these New Towns may perhaps offer an alternative to the endless sprawl of the Asian proto-metropolis. Do Songjiang (China), New Songdo City (South Korea) or BSD City (Indonesia) play the same role, vis-à-vis the sprawling megacities of Shanghai, Seoul or Jakarta, as the Garden Cities, New Frankfurt or the Villes Nouvelles played vis-à-vis the metropolises of London, Berlin or Paris in the 20th century? Are they the quantitatively negligible yet prophetic test-sites of a new 21st-century urbanity that would offer a real alternative to the 'natural' growth of megacities on which policies or plans, let alone designs, seem to have no effect whatsoever? While a hitherto unknown and mysterious type of urbanity is brewing in the outskirts of Shanghai, Seoul and Jakarta, new planning paradigms and urban politics for the 21st century are being developed in the New Towns across the continent. Or are they?

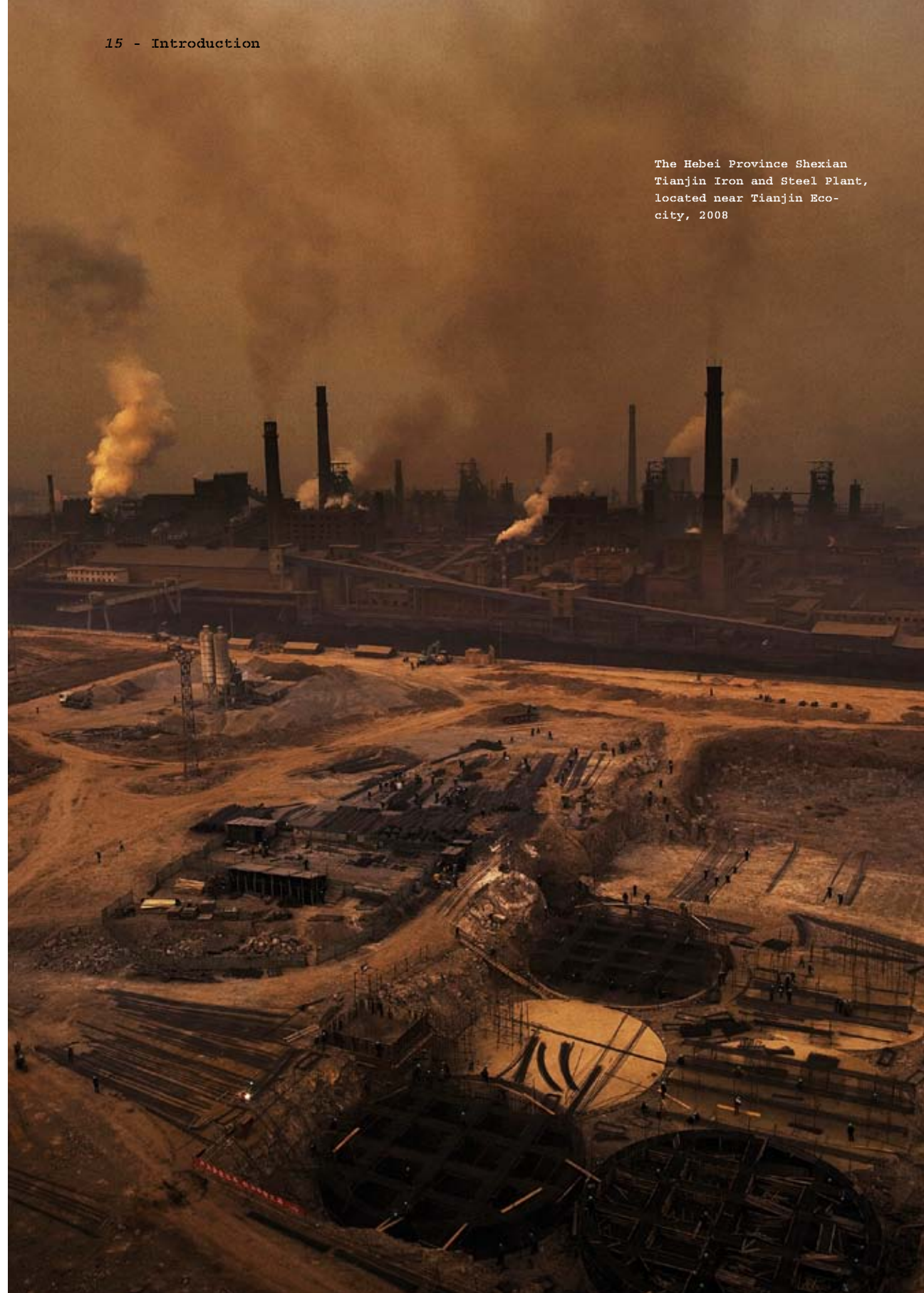
### Why build New Towns?

A loose definition of the New Town has been adopted in making the selection of plans and towns for this book. Officially, a New Town is one built from scratch as an autonomously administered town, built according to a masterplan, and often based on a political decision. All the same, there are fluid boundaries within that definition, there are small and large New Towns, and the degree of autonomy varies.

Historically, the construction of New Towns has almost always been based on a political decision taken by an organ of local or national government. That was the case for New Delhi, New Frankfurt, the British New Towns, and it continues to be true of the towns and cities dealt with here. To provide insight into the material, we have classified the cities in terms of the six main motives for the building of New Towns in recent decades:

- Eco-Cities: to achieve the best environmentally friendly performance
- Political Cities: to represent (national or local) government
- Enclave Cities: to offer a retreat from the existing city

The Hebei Province Shexian Tianjin Iron and Steel Plant, located near Tianjin Eco-city, 2008







- Economic Cities: to attract investment and kick-start the national economy
- High-Tech Cities: to utilize technology as an attraction
- Shelter Cities: to house the masses

For each category, two or three case studies are investigated to unravel which financial, political, social, economic, marketing and spatial principles the city has been based upon. Most cities will, of course, be grounded in a mixture of these motives, as the chapters will show.

### Eco-Cities

Although there is full agreement on the need for more environmentally friendly cities—at every level and in every country—most of the discoveries that we made during our search for the ‘best Eco-City of the moment’ were disappointing. In many cases, the so-called eco-friendly strategies turned out to be nothing more than greenwashing, where sustainability and ecology are used as a form of branding rather than forming an intrinsic part of the urban design concept. Greenwashing is not confined to branding or spin doctoring, but can also be physical. For instance: large-scale office developments that promote increased car traffic because of inadequate linkages with the public transport network actually increase pollution because of the way they have been built. Other strategies, like demolishing existing buildings only to replace them, could have been approached more conservatively by simply integrating less wasteful HVAC systems. Of course, it is a matter of opinion whether one regards this as greenwashing or as a small but significant improvement. The question is: what do we really expect from an Eco-City? At an urban scale, these questions become more urgent and their answers become more significant. It also becomes glaringly obvious that these extremely ambitious Eco-City projects are only sustainable if we consider them without their surrounding context. If we zoom out, we often find that pollution-spewing industries are built close by, sometimes by the same authorities as those behind the Eco-City. An example of this is Tianjin Eco-city, China, a city that forms part of a large-scale industrialization of the region. A further paradox is that most of the Eco-Cities that we have investigated for this book are still dominated by car use.

It is difficult to determine whether a city has been genuinely built or designed in a sustainable way, or whether it is a case of greenwashing. Words like ‘ecological’ or ‘sustainable’ have become container terms that are applied with a flexibility bordering on the incomprehensible. Ecology can be about the use of raw materials, but it can also stand for a dynamic economic cycle; sustainable can refer to the effects on the physical environment, but it can also be a question of social sustainability. Moreover, there are almost as many standards and measuring systems for sustainability as there are consultancies and projects, and as many definitions of sustainability as there are manifestos written by well-known gurus and professors.

In most cases it is obvious that only a fundamental and integrated approach to the design of a city offers the chance of achieving a genuine, quantifiable, ecological sustainability. However, that integrated, environmental approach is hindered by the programmatic segregation that is characteristic of large projects, and by the fact that short-term and medium-term financial and economic considerations usually gain the upper hand—often to the detriment of the project in question. All the same, the Eco-City is the only thematic planning approach currently regarded as the Holy Grail of contemporary urban design. After all, sustainability is one of the few subjects at the top of political agendas all around the world.

### Political Cities

Traditionally, the urge to charge new capitals with spectacular modern architecture has been a well-known strategy. It has led to the familiar examples of New Towns such as Washington, DC (USA), Chandigarh (India), New Delhi (India), Brasilia (Brazil), Islamabad (Pakistan) and Abuja (Nigeria). Through both their urban design concepts and in the architecture of the main public buildings, they represent the ambitions of the (usually new) nation to present itself in a modern, dignified, or efficient way. They are quite explicit about the fact that this imposing representation requires a rejection of the existing, often crowded and chaotic historical city. Brasilia was built in the inland jungle not only to symbolize a new beginning, but also to emphasize the unity and importance of the entire country—not just the coastal strip.

Symbolic and political factors are often most influential in the construction of new capitals, which are designed and built to convey a message. That's also why they are often located at the geographical center of a country, irrespective of the lack of good connections, or the fact that the greatest concentration of inhabitants is situated elsewhere. Another consideration is often that the (new) government does not want to choose between the existing cities that could compete for the role of capital, but are either connected with certain interest groups or parties, or have an image that does not always correspond to that of a capital. The choice for a clean slate, however, runs the risk of a breakaway. The most important institutions and their employees often refuse to move to the new cities, and new capitals sometimes maintain an artificial and provincial character. Even cities with a history of half a century or longer still suffer from this drawback. This is true of national capitals like Brasilia and Canberra, but also of provincial capitals such as Chandigarh.

Another, Machiavellian, political motive to detach the seat of government from the most important metropolis is to place it outside the influence of a population of millions that might prove difficult to keep under control. By creating an entirely new capital far removed from the urban complexity of the former capital, the political leaders hope to purge opposition and prevent rebellion. Not only internal threats scare them; a coastal location is also often regarded as more vulnerable because of the risk of a foreign invasion. The construction of a new capital is thus often an expression

of fear of (and for) the city and of the population's demand for freedom and democracy. The two new capitals presented in this book – Astana in Kazakhstan and Naypyidaw in Myanmar, are certainly partly based on the paranoia of the totalitarian regimes that created them. Both want to protect themselves from the popular rebellions and revolutions that have always fomented in large historical cities. In Kazakhstan, this has led to an absurdly monumental city, far from the unpredictable former capital of Almaty, and now President Nazarbayev's personal architectural playground. In Myanmar, it has led to a secretive, almost invisible, forbidden city in the remote interior, as far as possible from the Burmese metropolis Rangoon (Yangon) on the coast.

In spite of the fact that the construction of new capitals can be a dubious and risky enterprise—as the examples in this book demonstrate—it remains, of course, an urban design assignment of almost mythical status, and one that few architects or planners are able to refuse.

### Enclave Cities

A similar anti-urban impulse to the one behind some Political Cities is also the driving force behind the Enclave Cities: clean, safe cities with customized facilities, built for specific target groups who want to be spared the difficulties of the existing cities; for example, expats, party political elites, or simply the richest citizens. Like some Eco-Cities, these Enclave Cities are sometimes built in the middle of the desert, or on other virgin territory, as long as they are far enough away from the 'compromised' historical Asian or Arabian city. The *raison d'être* of these cities is likewise the fear of chaos in the historical city and the lack of political will or resources to do anything about it.

Fear of the urban environment's unpredictability dominates not only the customers of these new cities or the administrators and entrepreneurs who build them, but also the architects who design them. And that is not confined to Enclave Cities. Rem Koolhaas (OMA) breathed a sigh of relief that there was no environment or context of any importance in the design of the high-tech New Songdo City (Korea): 'Compared to the chaotic and compromised conditions that now prevail in Seoul – where the pressure of development constantly outstrips planning – the "new" regions on the Yellow Sea offer ambitions and opportunities to start from scratch and create new communities where architecture, landscape and infrastructure form an integrated whole'.<sup>5</sup> 'Chaotic and compromised': was not that once the ultimate quality of the metropolis celebrated in a previous incarnation of the same Koolhaas, in *Delirious New York*, and elevated to the ideology of his firm, Office For Metropolitan Architecture?

### Economic Cities

On the basis of the history of (Western) urban design, we tend to regard the demographic growth and emigration from the countryside to the city as the main reason for the planning and construction of New Towns. However, this does not apply to the latest generation of New Towns

<sup>5</sup> "Asia New Towns. Four proposals for covering a blank slate", in: Rem Koolhaas (ed.), *Content*, Cologne, 2004, pp. 426-433.



<sup>6</sup> Building Rome in a Day. The sustainability of China's housing boom, *The Economist Intelligence Unit*, 2011.

<sup>7</sup> David Harvey, *A Brief History of Neoliberalism*, New York, 2005, p. 146.

that we see springing up in Asia. They are often not a reaction to a demographic trend, but rather a means of stimulating it. While in Europe migration to the city was seen as a problem that had to be diluted by building *Groekernen*, *Villes Nouvelles*, *Trabantenstädte* and *New Towns*, the new cities in Asia are built to attract as many people as possible from the countryside to the city to speed up the modernization of the national economy. New Towns are thus not a means of tempering the socio-economic consequences of progress, but a way of lending that progress a helping hand.

Perhaps unsurprisingly, the majority of the cities discussed in this book (and the majority of the recent New Towns planned or built in Asia), were developed with economic motives to stimulate a particular economic sector, such as ICT, or to compensate for the loss of another. Starting in the late 1970s, China developed the Special Economic Zone (SEZ), as a channel through which to enable the People's Republic to profit from capitalist Hong Kong. First developed in Shenzhen, the SEZ model was later applied across China and in other Asian countries, especially India. The cities in the Arabian peninsula, such as King Abdullah Economic City and its three sister cities, were developed to anticipate the falling oil reserves by compensating them with service-orientated industries.

In other cases the building of a New Town is itself the economic motive. Governments like those of Korea, China and Turkey are so closely involved with the interests of the building industry, and their policies are so dependent on the number of jobs created, that the construction of new cities is a crucial part of the economic policy. Nourishing and maintaining the building sector and preventing unemployment are important economic factors, and the national economies often depend not only on housing but also the infrastructure of roads, bridges and earthworks. Also, the many empty towns in China, the New Towns in which all the housing is sold upon completion but left empty, indicate that a direct shortage of housing is not always the main reason for building the Chinese New Towns, but that their construction has become an economic end in itself rather than a means.

Many see the empty Chinese New Towns as symptomatic of a Chinese real estate bubble that is about to burst; all the same, this prophecy of doom has not been fulfilled, nor does it seem to be on the horizon. For a number of reasons (migration, gender imbalance, low taxes and cultural differences), the demand for housing is expected to increase and a projected increase in the number of square meters per resident will continue to support this trend in the decades ahead.<sup>6</sup> The effects of this relentless building machine on the existing communities in the city and in the countryside, however, are the object of criticism and controversy. Real estate development in and around the large cities in China and the SEZs has become a source of quick wealth.<sup>7</sup> Farmers without any right to property may easily be expelled, receive a small allowance, and have no choice but to become laborers and to live in an apartment. The city grants the land to developers and thereby earns considerable sums of money.

Seventy million farmers have already lost their land in China alone. This practice, by which the government sells or grants land to (foreign) developers at the expense of small farmers seems to be a common one in Asia, and can be seen in other countries such as Bangladesh or Cambodia as well. The Indian farmers of Magarpatta achieved a milestone in this respect with the development of their own New Town. This is the only known example of bottom-up New Town development to date.

<sup>8</sup> *Ibid.*, p. 87.

## High-Tech Cities

The equipping of new cities with a large degree of high-tech facilities and the marketing of these cities as excellent places to establish a business is one of the ways in which countries and cities put themselves on the market. As a superlative form of city marketing, entire new cities are designed and built as a commercial product for the global business market. The most important quality that is sought by such cities is to achieve as complete and rapid a link as possible with all the possible networks that are important for trade: lightning-speed Internet connections, international airports and high-speed trains. Equally important secondary conditions often include low taxes, security (gates, guards, video surveillance, etc.), and a luxurious supply of hypermodern homes, culture and entertainment. This results in a worldwide competition in which the suppliers of these qualities develop them increasingly further. Entirely in accordance with the market mechanism, increasingly 'better' cities emerge. The term 'better' refers to the specific criteria that apply to the choice of a location for a globally operating enterprise, for whom the seamless connection of the city with the global trade networks is of primary importance.

In his book, *A Brief History of Neoliberalism*, David Harvey draws a direct connection between the rise of neoliberalism and the mutual competition between cities and countries to become the best business location: 'Competition between territories (states, regions, or cities) as to who had the best model for economic development or the best business climate was relatively insignificant in the 1950s and 1960s. Competition of this sort heightened in the more fluid and open systems of trading relations established after 1970'.<sup>8</sup> Harvey points out a major difference with the way in which New Towns were developed in the era of the Cold War. The far greater importance of the nation state in the 1950s and 1960s was the main distinguishing factor. Cities were not developed to compete directly with one another on a global market, but to represent the modernity of the nation on a political 'market'. In present-day relations the nation state plays no more than a facilitating role for city marketing and the High-Tech Cities.

The building of High-Tech Cities is primarily about the competition between cities and regions rather than between countries. Chinese cities compete with one another as the best business location by constructing as many airports, ports and industrial estates as they can, even if they are actually too close to one another to justify the presence of these facilities.



In other words, competition has come to replace industrial policy and national planning. Theatres, museums and high-class residential districts are built in the Emirates to attract capital, even though there is no local base to support it; the hope is above all to attract foreign capital and residents.

In spite of all those attempts to be distinctive, it is remarkable how the representation of the cities to be built, the images, the renderings and the generic towers resemble one another. The brochures all praise the cities in the same way, and eventually all the cities become identical. The desire to compete leads to a new generation of generic cities (heirs to the generic cities of the 1960s?), each of which offers the best of the best.

### Shelter Cities

The primary function of the building of a city or urban district is to provide housing for the masses who flood the cities from the countryside or other regions looking for work, fortune, freedom, safety, and the chance to improve their circumstances. The cities classified in this book as Shelter Cities treat this vital function as a priority: they were built in the first instance to accommodate mass immigration. They are concentrations of housing, and all other facilities are derived from that. This can lead to incredible differences in their qualities and characteristics, as the three cities in this selection show.

There is Songjiang, part of the series of nine New Towns built around Shanghai, each of which has a core with a different architectural theme from historical Europe: a Dutch, a Scandinavian, or a British quarter. Artificial environments have been created following the rules of the Experience Economy to enrich the residential environment, which consists of endless rows of standard flats, and to give it an identity. In Bumi Serpong Damai (Indonesia), priority has been given to a hypermodern combination of state-of-the-art facilities that make this part of Jakarta a comfortable and safe residential environment, complete with a golf course developed by Jack Nicklaus, high-speed connections with the CBD, lavish facilities, and so on.

But to find the bottom line of the Shelter City we have to go to the New Towns that were built solely to accommodate new city folk as efficiently as possible. These are enormous concentrations of densely clustered apartment blocks, often developed by the state, often far from the city center, often lacking in facilities or employment, and often with an extremely bad reputation. Tin Shui Wai, the 'City of Misery' near Hong Kong, is the example in this book, but there are thousands of similar examples scattered all over the world.

These three cases show that although shelter is the basic function of the city and of the New Town, the residential program alone is never enough to produce an attractive city with future value. The addition of luxurious attributes to attract the middle classes to the new upscale suburbs and the disastrous consequences of a pure concentration of thousands of apartments in New Towns like Tin Shui Wai show that a city cannot be based on shelter alone.

The rapid urbanization in Asia is often described as a natural process, but it is in fact usually encouraged and exploited for economic development. This raises the question of which demographic policy lies behind the construction of cities oriented exclusively towards housing? This is most common in China, where mass immigration has been stimulated by two factors: the economic privileging of the cities above the countryside as a pull factor, and the lack of dynamism and development in the countryside as a push factor. Partially as a result, China has become marked by an increasing inequality between demographic groups. 'China has travelled the path from one of the poorest and most egalitarian societies to chronic inequality all in the space of twenty years', is how the sociologist David Harvey puts it.<sup>9</sup>

Of course, the Chinese government denies this. It points out that nowhere else have so many people been freed from poverty in such a short time as during the last few decades in China. Cities play a crucial economic role in this massive leap forward. Living in a city is regarded as the most fundamental condition for improving the living conditions of the Chinese citizen. It is thus telling that the theme of the World Expo Shanghai 2010 was 'Better City, Better Life', and that this exhibition was visited by tens of millions of people from the countryside.

### The Heroic Period of planning revisited?

We can understand the New Towns of Asia as completely contemporary responses to functional, political or economic demands, as suggested above. We can also examine the design and construction of cities as a cultural act that fits into the history of planning and urbanization. As far as the first half of the 20th century is concerned, it is mainly Western history that serves as the background for our reflection on the present generation of Asian cities. It is important to make this explicit: 20th-century Western urban planning provides us with the tools to analyze the latest tendency, but at the same time it determines the political and ethical criteria by which we assess these cities. We shall therefore try to compare the current batch of New Towns with three periods in the history of 20th-century urban planning and consider the validity of such a comparison. The first is the pioneering stage of Western urban planning between 1900 and 1930; the second is that of the post-war reconstruction of Europe between 1945 and 1960; and the third is the expansion of Western planning models to the colonial and postcolonial East and South between 1950 and 1970.

During what is usually called the heroic period of urban planning, the period between the publication of *Garden Cities of To-morrow* (1902), by Ebenezer Howard, and the implementation of New Frankfurt (1925-1930), a loose combination of enlightened entrepreneurs, reformists, scientific planners, social democrat politicians and communist architects forged the beginnings of a new political-urban-architectural consensus about what constitutes a good city and how it might be built. They

<sup>9</sup> Ibid., pp. 143-144.

<sup>10</sup> See Wouter Vanstiphout, “Sprong over het heden”, in: Coen Simon (ed.), *Het politieke dier; de ontdekking van een soort*, Groningen 2010.

operated with a reformist agenda, sharing a strongly held belief that the physical circumstances under which people lived had a profound effect on their happiness, virtue, health and their chances of emancipating themselves and creating a better life for themselves and for their children. They also operated on the basis of a shared disgust and fear of the endlessly expanding cities; cities that were growing because of massive rural emigration, leaving behind the impoverished and empty villages and towns of rural France, England and Germany.

Of course these few examples of near-utopian settlements never had any decisive effect themselves on the demographic tidal wave of the late industrial era before World War II, but they created a huge reservoir of urban instruments, scientific and artistic methods, examples and symbols of not just a new urbanity, but also an entirely new discipline: urban planning. They created the idea that a worker in a factory could live in a cottage with a garden, thereby foreshadowing suburbia. They also created the toolbox for governments to shape, reshape, transform, extend, and plan from scratch cities not just as a set of buildings on a grid of infrastructure, but as coherently composed complexes of industry, leisure, housing, education and health care. They took the ideas already proposed by Greek philosophy that a city is both a socio-economic and a physico-spatial human creation that answers to certain universal laws of size, proportion and functional zoning, and turned them into manuals for good urban planning that have been shockingly consistent in their uses all over the globe during the 20th century, notwithstanding the sometimes extreme cultural, meteorological or economic differences in context.<sup>10</sup>

Should we compare the enormous and diverse production of New Towns in the Asian continent with the seminal period in the early 20th century when planning hardly had any effect on the quantitative challenges of the cities at that time, but laid the foundations for an entirely new conception of cities and city building for the decades afterwards?

Given the enormous scale of contemporary urbanization and the degree to which the planning of cities is a key element in the modernization policies of the Asian countries, a comparison with the post-war modernization and urbanization of Europe seems appropriate. In the period between 1948 and 1968 there was an exceptionally large reliance on the part of governments in planning, modern architecture, urbanization, infrastructure and the central role of the state in creating a new society. This is the period in which the Western New Towns were built, an era that witnessed an exponential rise in the standard of living of European citizens. During this period the construction of completely new cities was the main assignment of urban planners and architects, and the devising of new urban futures was the main obsession that occupied the theoreticians and avant-garde of architecture. Examples of planning from this period are the New Towns built around London between the 1940s and 1960s; the Dutch *groeikernen* such as Zoetermeer, Spijkenisse, Capelle aan de IJssel, and New Towns like Hoogvliet and Lelystad; the German New Towns and large-scale expansion districts on either side of the Iron Curtain, such as

Gropiusstadt in West Berlin and Marzahn in East Berlin; the hundreds of *Grands Ensembles* around the French cities that have been in the news in the last couple of decades only for their poverty, deprivation and violence. There are also the Scandinavian New Towns – the design is excellent, but they are now subject to social corrosion – such as Gellerup near Aarhus, Albertslund near Copenhagen, and Vällingby and Rinkeby near Stockholm. And there are the utopian icons, such as the Bijlmermeer near Amsterdam, Cumbernauld in Scotland, Le Mirail near Toulouse, and Louvain la Neuve in Wallonia, where the architectural avant-garde was given a mandate that would be inconceivable today to build towns entirely in accordance with architectural concepts, based on an exceptional confidence in the ability of the design to determine the new urbanity and society.

This period of some twenty years also witnessed the high-speed development of the bureaucratic apparatuses that were responsible for the building of cities and districts and of the industrialization of housing. The large scale and the haste with which the urban expansion and the solution of the housing shortage were tackled led to blueprint planning with an urban model that was repeated all over the world and was based on concepts developed in the Garden City movement and the British New Towns: the neighborhood unit as structural principle (repeated neighborhood units of 5,000 residents), and a strict hierarchy in the spatial organization (street-neighborhood-district–zone-city) and in the infrastructure (from paths between houses to motorways). Moreover, the urban program was divided into zones: schools, facilities and businesses were allocated their own separate zone; a mixture of functions was regarded as inefficient and disruptive. As the 1960s proceeded, the housing program was increasingly interpreted as industrial high-rise apartment blocks, with the French *Banlieues* as the most typical example. Far more than in the heroic early period of the first decades of the 20th century, the new city left its mark on the culture and economy of post-war Europe: as an object of fascination and speculation, but above all as a physical reality that determined the environment of an increasing proportion of the growing population.

It is interesting and instructive to see the present Asian urbanization in terms of European post-war modernization, because we may better understand both the ruthless enthusiasm with which planners and governments welcome urbanization and modernization, and the concern and impotence of the “victims” of this historical steamroller. Perhaps we may also risk predicting the dangers and long-term effects of the current Asian phenomenon on the basis of our own experiences. Is it far-fetched to see the high-rise districts around Hong Kong as the new French *Banlieues*, including their social problems? Can we regard the middle-class Enclave Cities, with their one-sided demographic structure, as the successors to the dated *groeikernen* of the 1970s? And how much patience will we need before the Asian equivalent of critical contextualism emerges, as that movement appeared in the cities of the West in the 1970s?



## Export of Western planning

But perhaps what is happening in contemporary Asia is determined much more by the geographical and cultural context, and a comparison with post-war Europe is meaningless because it is solely based on the assumption of a comparable economic and demographic dynamism. In that case, a historical comparison would only make sense if it were to target a period of intense modernization and urbanization that took place on the same continent. Such a period was the era of decolonization and modernization in the newly independent African and Asian states during the 1950s and 1960s. Then, as now, there was a huge eastward and southward export of Western urban planning models and expertise, producing new cities and urban extensions on a scale that had not been seen since the reconstruction of the European cities after the war. It seemed as if new nation states like India, Iraq, Pakistan, Libya or Ghana could profit from the immense expertise and readiness accumulated by European and American planners, who had been able to combine the lessons of the new modernist science of planning with the enormous challenge of rebuilding Europe in a decade and a half.

The new sovereign states in Asia and Africa moved forward at an astonishing speed, not just quantitatively in the direction of industrial, urban nations but also in a qualitative, cultural way, taking huge strides in the direction of national pride, democracy, entrepreneurialism and culture, combining the best of the new global modernization with the best of their recently rediscovered pride in their own heritage, history and independence. Somehow the new scientific planning, combined with the modernist architecture that accompanied it, allowed the new countries to cut off the colonial ties to the oppressors symbolized by the imported Neo-Georgian English or Neo-Classical French styles. The new urban planning and the new architecture offered them not only a post-historical, modern and forward-looking idea for their cities, but also an abstract, neutral architectural style that could be gradually customized with elements from the local, sovereign architectural history.

This episode in urban history is hardly more than a footnote in the received histories of 20th-century architecture and planning, and, in comparison with the actual urbanization of Asia, the imported planning had a very limited quantitative impact in the period up to the 1970s. Its long-term impact on the discipline and industry of the planning and engineering of Asian cities was important, however. The Western consultants and planners who did pioneering work in Asia in the 1950s, 1960s and 1970s can be regarded as the shoulders on which the current wave of Western planners that now swarms over the continent stands.

Perhaps not the most famous, but by far the most effective, of the first wave of multinational planning consultants was the Greek architect and engineer Constantinos Doxiadis. With his self-constructed 'science of human settlements', Ekistics, he managed to not just design but also implement New Towns, extensions to existing cities, and also entire ecologies of agriculture and villages, waterworks, sewage installations,







Baghdad, Iraq

systems of tourist towns, and urban renewal projects across four continents, with the biggest portion realized in the Middle East and the Indian subcontinent.

The most fascinating aspect of the Doxiadis' extensive portfolio—which includes huge parts of Baghdad and Riyadh, the entire capital city of Islamabad, a new city east of Karachi, cities in Libya, Ghana, Zambia, and a whole collection of villages in Iraq (the list goes on)—is that it follows a clear and universally understood method of what constitutes a good city: a hierarchical formula of the neighborhood, the borough, the city, the region, etc. He did not stop there, but distinguished himself from his many competitors by always defining the plans as just a step in the direction of an ever bigger process of human settlement, ultimately leading up to a web of carefully planned urban corridors spanning the entire globe, wiping away all memory of national borders or conflicting histories. His city was truly post-war in its utopian striving towards a global brotherhood of humankind, given form in one single global city, an urban planet.

But what also makes his work fascinating is that these universalist notions—that would seem to verge on the incredible today—were combined with a hyper-professional global network of consultants and offices, lawyers and lobbyists, engineers and designers, who managed to do the political groundwork and build the sewers as well. In the end, Doxiadis planned and implemented homes and workplaces used by millions of people, a large proportion of whom had never lived in a city before. Doxiadis was not unique, however; architects and consultants like Fry & Drew, Otto Königsberger and Llewellyn Davies, the Gruzen Partnership, The Architects Collaborative (Walter Gropius) and Victor Gruen not only planned and built enormous cities, campuses and New Towns in Asia and Africa throughout the 1960s and 1970s, but they also laid the foundation and opened the channels for their followers.<sup>11</sup>

Contemporary offices like KCAP and Kuiper Compagnons from the Netherlands, Atkins and HOK from the UK, GMP from Germany, and (once again) the offices of KPF and Doxiadis Associates, take up an enormous part of the jobs being offered by the most recent wave of New Towns built between Saudi Arabia and Korea, Azerbaijan and the Philippines. Are these practices simply profiting from the consultancy outposts created by their post-war forebears? Probably not 'simply', because Asia itself has become perfectly capable of producing its own design, planning and engineering consultancies, and the difference between the work of European, American and Asian planners is often hardly recognizable. This is partly because of the institutions, engineering schools and planning laws that have been erected in Asia since World War II, and have been modeled according to Western influences. In other words: has Western planning become endemic in the East, just like so many other technologies originating in the West?

It would certainly seem so, if we look at some of the plans that are being produced right now, either by Asian governmental institutions, Western offices, or local consultancies, and see how closely they resemble typical modernist planning of the 1960s. We recognize the same system of

<sup>11</sup> What did they design? Fry & Drew: Tema Manhean, Ghana, Campus University in Ibadan, Nigeria and numerous projects in the West African countries. The Gruzen Partnership: Ekbatan, Tehran; TAC: Baghdad University, Victor Gruen: Master Plan Teheran.



neighborhoods divided by a system of parkways; we recognize the same zoning of functions and facilities over the map, strictly separating the housing from the working or industrial quarters; we recognize the same abundance of high-rise buildings and the fixation on car-based mobility. Sometimes the plans even use the same graphic representation, the same legend and the same color codes: a contemporary plan for a New Town on the Arabian Peninsula made by a run-of-the-mill consultancy firm may closely resemble, say, a blueprint from the mid-1960s by Constantinos Doxiadis for the planning of the urban region of Detroit. But while the spatial translation of the program follows many principles of modernist urban planning, we also see that the current blueprint planning of New Towns has very little in common with the social engineering that played such an important part in the New Town planning of the 1960s. At that time the social democratic governments had ambitions to create an open society by designing cities according to an open plan. The ambitions of the present Asian governments, with their urbanization policies and their New Towns, are very different. In spite of the graphic and methodological parallels and rudiments of modernism, urban planning is executed in China today very differently than it was in 1960s Europe. Above all, the masterplan has become part of a much larger and more complex mixture of factors and instruments.

The most decisive factor is, of course, the fact that the central position is now occupied by large multinational enterprises instead of governments. The exchange of knowledge, the competition in global listings and the ultimate authority over the plan no longer rests with national government, but with separate cities and multinational corporations. Globalization's influence on the economy can be seen in the surprising fact that some of the New Towns are even built by foreign governments: CamKo in Cambodia was partly financed by the Korean government, and Singapore is investing and building in many cities, like the new Tianjin Eco-city in China.

We have to examine which social, economic and political values are invested in these plans instead of reading them through the lens of Western history with large-scale planning. One of the questions, for example, is whether the community of architects and urban planners, whose support for the project of the New Towns and the large-scale transformation of cities in the 1950s and 1960s went without saying, identifies in the same way with the cities that it is now designing.

### The architect's role

The sometimes stunning uniformity in the planned structure of the contemporary Asian New Towns, and their throwback to many planning clichés, makes it difficult for architects and critics to imagine that these towns could be the prototypes for an entirely new generation of urban planning. What also makes for a somewhat depressing picture is the fact that the urban plans presented in this book seem to be purely driven by quantitative, commercial and technical objectives. They are utterly void of architectural theory, urban ideology, or even design ideas

in the first place. If we compare them to the seminal towns of Unwin & Parker, Clarence Stein or Ernst May, down to the massive projects implemented in the post-war period by Victor Gruen, Constantinos Doxiadis or Otto Königsberger, they are not the practical results of any planning theories that are expressed in books and taught in universities. Baghdad, Islamabad, Marsa al Brega, Tema, Khartoum and Karachi are all predicted and explained in Doxiadis' *Ekistics*, Tehran by Gruen's *The Heart of Our Cities* and Singapore and Bhubaneshwar by Königsberger's 'Action Planning' courses at the University College London (UCL) during the 1960s. The contemporary Asian New Towns are ideological orphans, giving us no recourse to question, let alone blame, the planner or the architect.

That might be the single biggest difference from the post-war generation of New Towns, also in Asia. While both waves are similar in sheer quantity, their shocking uniformity and the universality of their principles, the towns of the previous generation were wholeheartedly 'owned' by the architectural and planning community, while the contemporary designers and planners seem to play an entirely different, even marginal, role.

This seems paradoxical, given the prominence with which architectural icons and international star architects seem to dominate the center stage of these new developments, so different from their position in the post-war generation of Asian New Towns. Apart from some very architecturally-driven designs like Chandigarh and Brasilia, architecture in these cities usually had a humble presence. However, architects were much more central to the planning of these cities than they are right now, seeing through the entire process, from the most basic planning choices to the design of the most important buildings. In other words: architects did not need architecture to achieve control over the city; they were involved in its very structure. Often they were even involved in seeking out the best locations for the new cities. This is a far cry from the current generation of architects who are invited to design magnificent iconic buildings that will determine the postcard image of the cities, but who work within a plan that is usually completely determined by anonymous engineers. But more important than the loss of influence over the fundamentals of a city on the part of the architects is perhaps the more subtle, but no less dramatic, change in their attitudes regarding the New Towns to which they render their services as consultants and/or iconic designers. This attitude is one of a limited but extremely sensationalized role of creating the design image of the Town. This happens either through spectacular competition entries, or by creating immense and futuristic icons. Often, Asian franchises of Western cultural institutions like the Louvre, the Guggenheim, etc., are housed in magnificent, scaleless, dream-like architectures. Here we see how 'The East' still plays the role of the playground or the imaginary hunting ground for Western architects, whose attempts at creating their dreams in the democratic bureaucracies of the West are constantly frustrated. Therefore the projects by BIG, MVRDV, Zaha Hadid, Frank Gehry, OMA and others in the East can be seen as similar to those of their predecessors Gropius, Kahn and Le Corbusier, who in the East finally found the clients they needed to fulfill their promises.<sup>12</sup>

<sup>12</sup> Gropius designed the University in Baghdad, Louis Kahn the Government Center in Dacca, Le Corbusier a Sports Center in Baghdad.

**13** In this development the magazine *Urban China*, published from 2005 on, seems to be a leading factor. See also: Christine de Baan, Huang Du, Jaap Guldemon, Garrie van Pinxteren, Linda Vlassenrood, *China Contemporary, Architecture, Art, Visual Culture*, Rotterdam, 2006.

The partial megalomania of Western architects in Asia leaves us with a paradox: the designing of New Towns, the construction of entirely new, integral urban systems, the writing of technocratic and ideological books on how to build new cities, has all but disappeared from architectural education and publications in Western architecture and planning schools. We might even go so far as to say that the architectural and planning elites, the ones who dominate the design debates, are in general not very interested in New Towns. In the 21st century, building the New City is no longer the ultimate horizon, the climax of architectural thinking and urban ideology. Architectural debate, when applied to urban matters, is much more animated by the massive, unplanned migration to cities, by terrifying statistics and fascinating images coming from the megalopolises of the developing world than by any new version of Ekistics. While architects and planners are designing entire cities and constructing architectural icons *ex nihilo* in green fields, 'their' schools theorize mostly about the inability to plan urbanization, architectural acupuncture and bottom-up urban politics.

The contents of the most important books on cities that are being produced, and the contents of the portfolios of many successful Western architectural practices, present us with the schizophrenia of the architectural community's attitude towards New Town planning specifically, and the waves of modernization in the East in general. It shows the effect of a decades-old taboo in the West on the construction of 'big stories' and universal progressive concepts. There are no new concepts to deal with big numbers or with which to channel huge waves of urbanization. Moreover, it makes clear that the dominant architecture and planning schools are based in parts of the world where mega-growth and hyper-modernization are things of the past. It simply means that there is a mismatch between the cultural and theoretical underpinnings of Western architects and the increasing role of Asian projects in their portfolio. This mismatch might, however, soon be a thing of the past, now that we see an accelerating rise of innovative and experimental Asian architectural practices. The importance of Asian planning and design schools also seems to be growing.<sup>13</sup> We can therefore expect a gradual decrease of the Western share of important design and consulting jobs in Asia, and possibly also a decrease of originally Western concepts in architectural and planning education and criticism.

When it comes to urbanization, architects are no longer themselves the protagonists in the creation of new cities, but the fascinated (or horrified) outsiders looking in. The New Towns, whose location, program, size and structure are shaped by political, technical or economic factors, are seen as something that is simply happening, as a natural phenomenon, to which the architects can only react. The ambiguous nature of books like *Al Manakh I & II*, produced by the intellectual avant-garde in alliance with the most famous 'art house', architectural firm OMA, is typical of this position. The commissions to design New Towns in the Arabian Peninsula are seen as part of a fascinating cultural phenomenon, a huge wave of strangeness

and extremes coming from the East, that unsettles the moral and professional confidence of the West. The architects have a duty to understand this wave before passing judgment on it. But to reserve judgment also means, of course, a legitimization of 'taking the job' and building the CBD, the museum or the governmental center. Shumon Basar demonstrates this attitude in the publication *Instant Cities*, in which he describes Dubai as a superficial vision, but nevertheless as the recipe for the 21st century city from which Western cities can still learn a thing or two. Those lessons are rather cynical: 'invite the super-rich to visit and move-in first', 'import an endless supply of labourers and service class from abroad', 'people love history' and 'install an alternative to participatory democracy'.<sup>14</sup> These are lessons that do not have much to offer the cities of the West, given their democratic systems, but that were welcomed with open arms by the Chinese and other regimes of the Far East, where the same seems to apply as in Dubai: "Accountability comes only in the form of guaranteeing a lifestyle good enough for everyone to sacrifice their electoral representation".<sup>15</sup>

What interests us is not so much the moral standard of this attitude, but its implications for the architectural profession. Ironically or not, it shows that the architect accepts his role as an outsider in an economic and political world that is outside of his or her control. This allows the architect to play both the role of the consulting designer and of the fascinated journalist or explorer, who brings back to the West captivating stories of building in the Orient. Since architecture and urban planning do not play a fundamental role in defining the meaning of these new cities in Asia, does that mean that we should not see the architects and the planners as the 'authors' of the cities presented in this book? Does it mean that the real value of these cities lies not in the attractive architectural images, but in other urban properties that are being produced? Can we even still speak of the 'design' of cities, or has design become no more than the icing on a cake in which design hardly plays a significant role at all? Or does it mean that we should give the term 'design of cities' a different meaning, one that has less to do with visual or even spatial design than with deeper, structural decisions made by engineers, politicians and economists whom we hardly know? To look beyond the shape and form of the new wave of Asian cities and understand their real value is all the more difficult because the images produced are so overwhelming, so rich and so all-engulfing that they seem to make it impossible to see anything else. An extra complication comes with the fact that most of these cities have not been completed and they have yet to acquire any real urban culture or identity.

### Neo-Liberal Cities

What does become abundantly clear, however, is that these cities do have authors; that they do present extremely specific stories and play highly defined roles in sometimes very strong scenarios. Who writes these scenarios? The answer: governments, multinational corporations, consultancies, investment banks, but also (sometimes) social activists or

**14** Shumon Basar, "12 ultimate critical steps to sudden urban success", in: Herbert Wright (ed.), *Instant Cities*, London, 2008.  
**15** *Ibid.*, p. 82.

private entrepreneurs. The real dramatic change since the heroic periods of the first and the third quarters of the 20th century is the huge diversification of actors who are responsible for these cities, the way the cities are programmed economically, and the way they are financed, maintained, operated and built.

If we return to our comparison of the present generation of New Towns to the post-war New Towns in Europe, major differences in the underlying conditions stand out. What took place in Europe was large-scale spatial development directed by the state, in which the New Towns played a crucial role. They were planned and produced where government, institutes and organizations meet one another. These diverse parties operated on the basis of a consensus on economic growth, cooperation, modernization and regulation of urbanization. Later, social themes such as emancipation and the equal distribution of knowledge and income arose as well. This is true to a greater or lesser extent for most of the countries of Western Europe in the period 1950-1970.

A similar structure of cooperation, embedded in society and deploying long-term social agendas, is lacking in most of the countries of Asia when it comes to building and spatial planning. Moreover, while the West took almost a century to make the transition from a pure 19th-century industrial economy to the globalized market economy, the Asian countries are effecting this transition within a couple of decades. The 20th century in the West was determined by both extreme outbursts of war and the construction of a democratic, open society with a state that intervened in all kinds of areas, from the industrial to the socio-cultural. Added to this was an extremely complex and extensive social midfield of public and semi-public organs, institutions, organizations and housing corporations. Our norms and values of spatial planning and urban design arose in a context dominated by bureaucracy and warfare, and they still show these scars. Urban design was partly shaped by social reform movements from the beginning of the century, such as the Garden City movement for good working-class homes and the Functional City. Moreover, World War II contributed to the emergence of a large consensus on the need to involve the entire European population in a renewal of city and countryside based on democracy and modernity, in which the New Towns played a crucial role. As a result, spatial planning and public architecture in Western urban design are still associated with collective social values, reform agendas, democratization and the construction of an open society. Whatever the nature and motives of urban design and planning projects may be in Europe today, the social, collective and idealistic notions still play a role in our appreciation of them.

In Asia, where urban design and planning have a completely different background, these memories of the social roots of urban planning and architecture do not play any role and no lip service is paid to them. This may explain why the Asian New Towns can look so shamelessly elitist, so brazenly commercial, so shockingly superficial, so totally politically incorrect to Western eyes.

There is thus all the more reason not to view the Asian New Towns through the eyes of European urban design and planning alone. This may mean that we should look less at the deceptively familiar spatial structures and architectural content and more at the application of commercial, political and financial mechanisms that are extremely exotic and strange by Western standards. It is the totally different ways in which these cities are managed, ruled and made secure as economic tools, political tools, leisure machines or pure investment vehicles that should interest us, not the fact that their streets look like pastiches of European ones.

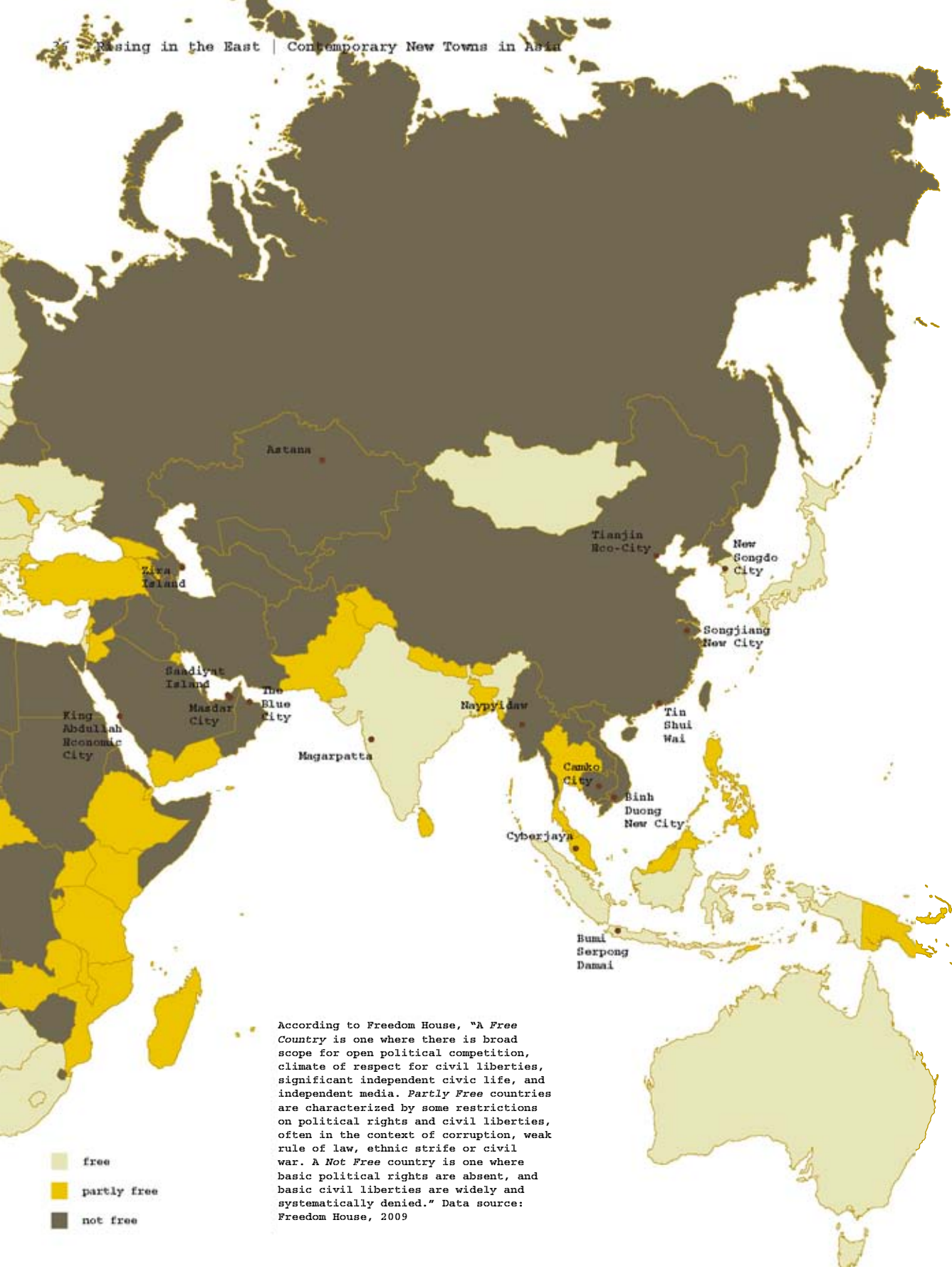
Economic motives are dominant in the case of almost all of the New Town initiatives; it is always a question of stimulating the urban or national economy through urban design. Social ambitions (in the sense of building for the entire population to bring about a combination of demographic or income groups), are lacking; there is no social or affordable housing. Instead of a community center, there is a clubhouse next to the golf links. These New Towns are populated by the middle and upper classes, while the lower income groups live in the old city or in self-organized cities (slums). By default of their mortgage prices, then, these New Towns become a sort of resort for expats and the (upper) middle class.

The uniformity of many of these cities is not so much the choice of the urban planners and designers as the consequence of a market orientation and the identical groups targeted by the investors. While in the 1960s the uniformity of cities was blamed on the dominant role of central government, it is now the market that is responsible for the uniformity of cities. James C. Scott, Professor of Political Science at Yale University, demonstrates in his well-known book, *Seeing like a State* (1998), that it is not just the (socialist) state or a national government that leads to large-scale, homogeneous, utopian plans because its power is not counterbalanced by lack of opposing forces: “[...] large-scale capitalism is just as much an agency of homogenization, uniformity, grids, and heroic simplification as the state is, with the difference being that, for capitalists, simplification must pay. A market necessarily reduces quality to quantity via the price mechanism and promotes standardization; in markets, money talks, not people. Today, global capitalism is perhaps the most powerful force for homogenization, whereas the state may in some instances be the defender of local difference and variety.”<sup>16</sup>

We find the pinnacle of homogenization in New Songdo (South Korea), where not only the architecture becomes a blueprint model to be repeated in other places, but everything from the urban plan down to the light fixtures is standardized. “Yes, it’s about making money”, Stan Gale, the initiator and developer of the city admits, but—as he states—this Instant City might also be the only way to make green cities a reality.<sup>17</sup> Now the blueprint is also being rolled out in Chongqing, Dalian and Wuxi, China.

Though less extreme, we see this homogenous character in most of today’s New Towns: it comes from being built by large international conglomerates of developers and investors in accordance with large-scale

<sup>16</sup> James C. Scott, *Seeing like a State. How Certain Schemes to Improve the Human Condition Have Failed*, Binghamton, New York, 1998, p. 8.  
<sup>17</sup> John Arlidge, “The greenest cities come in a box”, *The Sunday Times* 14-11-10.



patterns that are in the first instance economically motivated. After all, the city has to make a profit and generate economic development. Even if 70% of the housing is empty, as in the notorious empty cities of China, the city has still been a success: after all, all the houses have been sold, even if only for speculative ends.

18 Ibid., p. 2.

19 Idem, p. 5.

## Politics

Not only is economic motivation a common factor of the New Towns today, but also the fact that the vast majority of the cities in this book are located in countries with a dictatorship, a semi-democracy or a very young democracy. So the question is raised whether the shared characteristics of this new generation of New Towns are connected with the political systems that have initiated them: the large scale, the generic look, the commercial and economic motivation, the absence of social ambitions, the target group of the upper middle class and foreign capital. What influence does the political system have?

Once again, James C. Scott has published on this. He argues that there is a connection between the simplicity of urban design and the political system. He claims that it is a natural property of the government to want to create simplicity and legibility in order to maintain control over its subjects and their surroundings. When seen in this light, the design of cities is in line with the limitation of the number of surnames, the standardization of weights and measures and the institution of the land registry: they are all 'attempts at legibility and simplification'.<sup>18</sup>

Although Scott's publication deals primarily with the early modern European countries and the newer, post-war nations, the same principles apply, to a large extent, to the situation today. In Scott's view, Brasilia and Chandigarh are the prototypical examples of urban plans that have led to a catastrophe, and are hostile and unwelcoming to their inhabitants. Like the New Towns of China or of other authoritarian countries such as the Emirates, both cities are the product of a government that satisfies the four essential conditions of 'a full-fledged disaster': a well-developed administration, a high-modernist ideology, and most of all, an authoritarian state and a weak civil society. 'In sum, the legibility of a society provides the capacity for large-scale social engineering, high-modernist ideology provides the desire, the authoritarian state provides the determination to act on that desire, and an incapacitated civil society provides the leveled social terrain on which to build.'<sup>19</sup>

Seen in this light, the rigorous, rectilinear and simplified urban design of many of the New Towns under review bears a direct relation to the political system of which it is the product. Here, without exception, civil society is little developed or nominally influential and where government policy or market initiatives are not modified by any opposing forces. According to this argument, the conclusion must be that democratic countries yield better cities, but is that really the case? Have not large-scale plans been made and implemented in the democratic West that have also led to failures? It's enough to visit New Towns and housing estates such as Toulouse Le Mirail, the Bijlmer or Cumbernauld to see that well-intentioned plans to create human and humane cities have been





made within a solid and stable social democracy with the full consent and consensus of all parties, and yet shortly thereafter it became clear that the result was exactly the opposite.

The force of attraction of the autocratic regime is irresistible for architects and planners, whether it is in Kazakhstan, China or the Emirates. Koolhaas' seemingly intellectual plea for suspending judgment is equivalent to the inevitable flirtations of previous architects (such as Corbusier) with (authoritarian) power. Dictatorships make it possible to carry out projects that would take an eternity in the West. They are an ideal testing ground for trying out new models. The Eco-City is the best example of this. While the implementation of an Eco-City is virtually impossible in Europe for all kinds of reasons (the scale is not in demand and democracy raises an innumerable number of thresholds in their implementation), the countries of Western Europe are not candidates for the ideal testing ground, either.

We can hardly blame the architects for seizing the opportunity to innovate. What we should be able to judge architects and their designs by, however, is the intelligence and the moral values that they use in reporting on these developments, the icons they add, and the way they practice damage control or subvert the monstrous political and financial machines they piggyback. To make it a little more specific: in the tense dialectic between the political scenarios behind the new cities, and the unplanned way the new citizens change their new habitats from within, perhaps the architects could choose sides. Maybe their loyalty should lie with the fledgling urbanity instead of with the purity of the economic scheme in which they work. Maybe they should put the city before the project. In making this ethical choice between client and community, the architecture and planning community could redefine its moral grounding.

It is in the interest of every New Town to conquer the inevitable homogeneity that goes with its conception. However, every New Town needs time to be able to develop into a city in which not the concept but the city itself is what counts. The hope for the New Towns of Asia is that the region's economic and cultural dynamism may help these places to rise above the formulaic character out of which they were born. The first signs of the emergence of a civil society, of cultural initiatives and of emancipation and awareness on the part of population groups are grounds for optimism, at least when they are allowed to continue and ultimately help the citizens to appropriate and change their cities.

So, in conclusion: yes, the new generation of cities in Asia does represent an immense wave of new urban environments that will keep us busy for the decades to come. But do they offer the design vocabulary for a new urbanity, as the first generation of Garden Cities did? This book cannot yet give an answer; it can only document beginnings, original ambitions and scenarios.

Masdar City and Tianjin will surely bring new insights into ecological or sustainable ways of planning; New Songdo City will perhaps define a new role for ergonomics in the urban environment, or might present the still

revolutionary concept of the standardized city; and Magarpatta may show an as yet unknown way to organize and finance the building of a new city. Whether this will make them good and valuable cities, however, is something entirely different. The livability of the New Towns has never been something that the planners were able to provide, it has always been dependent on unexpected and unforeseeable events and adaptations; how they will be co-opted, changed, destroyed and rebuilt, how they will become cities instead of designs—those are the conditions that will count.

Although no one hopes that today's New Towns will share the same pitfalls as the New Towns of the West, there are, unfortunately, a number of signs pointing in that direction: most of these New Towns are built primarily for a single group (the upper middle class) and therefore have a demographic composition that is too homogeneous and vulnerable. They are almost entirely based on car mobility, with only a limited role for public transport. They are based on a zoning scheme that is outdated because of its rigidity, the separation of functions, and autonomous building blocks. The streets and public domain lack the qualities of the traditional local cities. The various ambitions to build in an ecological and sustainable way are not (yet) being achieved. The integration of history and cultural heritage, factors that can give meaning to a New Town, is being done in an extremely superficial way. The social aspects of sustainability (the preservation of existing or creation of new social structures) receive hardly any attention. The expulsion of farmers and the lower incomes to the periphery or outside the city is alarming. The social segregation that is exacerbated by the New Towns is equally worrying. Will this lead to the same social problems recently seen in the West? Will the typology of modernist massive housing also cause anonymity and alienation in Asia? Will we soon see riots in the quarters of Chinese cities where the lower incomes, the less well-off or the migrants live, as we saw more recently in the French *Banlieues* or in the English inner cities?

Or will the Asian cities by contrast fulfill the promises of Western urban design instead of repeating its nightmares? Just as the seemingly mono-functional suburbia in the West has, in some cases, proved to be a fertile ground for new types of urbanity, exchange, social dynamics and a diverse economy, so could the equally novel conditions of living in a leisure city, a cyber city, a zero-emission eco-town in the desert, or a co-op city for former farmers create ways of using the city that neither the architectural community nor the politicians and entrepreneurs responsible for these cities could have ever predicted.

In the end, instead of overeagerly expecting the repetition of scenarios well known to ourselves, we might just want to sit back and observe how these cities spawn new and creative social and economic practices that we simply do not know or have never witnessed. Perhaps forms of urbanity will spring up that we would not yet recognize as being urban; probably architectural backdrops that are completely alien to us now will become just as obviously urban as are the street, the square, the shopping mall or the housing estate to us today. We have tried to document a range of New Town projects across Asia that is as wide as possible. We have tried



to understand for whom, by whom (and also without whom) they are being built. But we have also tried to understand and explain what it is in ourselves that gives us such great fears and such huge ambitions with regard to these new cities in whose conception and implementation the members of the Western architecture and planning community are, at most, bit players.

And now that we have done all this, there is nothing left to do but wait for the myriad urban futures that will unfold in these cities over the coming decades.

Michelle Provoost and Wouter Vanstiphout

生态循环处理  
Ecocycling treatment

“After all, in addition to the obvious physical benefits, eco-cities are one of the swiftest ways to convey a political commitment to sustainable practices.”

能源 Energy

水 Water

垃圾 Garbage

不同层次的生态循环楼

## Chapter 1: Eco-Cities: Green is the New Black

Eco-cities are a relatively young urban phenomenon. If one were to attempt to trace an evolutionary line from the first attempts at eco-urbanism, that line would begin somewhere in the middle of the previous century.<sup>1</sup> In the 1960s, hippie communes sprang up throughout Europe and the United States, populated by pacifists who were opposed to the Vietnam War and what they perceived as a consumerist society.<sup>2</sup> Since then, eco-villages of varying sizes have multiplied across the United States and Europe, including the much-publicized Arcosanti in Arizona desert and Bill Dunster's Beddington Zero Energy Development (BedZED), in London. During the 1990s, the trend took hold in Scandinavia, and both Gothenburg, Sweden, and Kalundborg, Denmark, turned their attention towards developing more sustainable urban solutions.<sup>3</sup> By the early 2000s, developers with an eye for new markets began exploiting the financial opportunities of a growing 'green' movement, introducing ecologically focused neighborhoods around the world.

But in Asia things happen at scales and speeds that would be inconceivable in Europe or the United States, and in its Eastern manifestation the eco-village has now raged into a full-blown eco-metropolis. Booming populations create a need for larger-scale solutions, and both government bodies and private corporations have been quick to recognize the advantages of a global fixation on sustainability—even in China, villanized by environmentalists everywhere, there is a general awareness that continued economic growth will lead to disastrous results if current practices remain unchecked. To rectify its poor reputation, the People's Republic has been busy building eco-cities in some of its most polluted regions. According to a World Bank Report from 2009, China has already initiated more than 100 eco-city projects.<sup>4</sup> After all, in addition to the obvious physical benefits, eco-cities are one of the swiftest ways to convey a political commitment to sustainable practices. Throughout Asia, the past few years have provided a perfect climate for private developers implementing full-scale eco-cities: exploding populations require mass housing, and emerging economies have produced middle and upper classes with an eye

<sup>1</sup> Winarso, H., "Urban Dualism in the Jakarta Metropolitan Area", in: Sorenson, A. and J. Okata (eds), *Megacities: Urban Form, Governance and Sustainability*, Springer, Tokyo, 2011.

<sup>2</sup> Kusno, A., *Behind the Postcolonial: Architecture, Urban Space and Political Cultures in Indonesia*. Routledge, London, 2000.

<sup>3</sup> Leisch, H. "Structures and Functions of Private New Towns in Jabotabek", in: Nas, P.J.M. (ed), *The Indonesian New Town Revisited*, Lit Verlag, Germany, 2002.

<sup>4</sup> Of course, as New Towns, eco-cities have roots in the Garden Cities of the 1920s, but as a purely 'enviro-centric' phenomenon eco-cities are a very modern solution indeed. In fact, the term 'eco-city' wasn't even coined until 1987. In his book *Ecocity Berkeley: Building cities for a healthy future*, theorist Richard Register was the first to use the term. The publication used Berkeley, California, as a case study to illustrate different aspects of what Register considered to be a sustainable city.

<sup>2</sup> The Hog Farm is probably the most famous of these communes: a self-built, self-run cooperative that encouraged environmentally friendly lifestyles and farming practices.

<sup>3</sup> Norra Älvstranden, a neighborhood in Gothenburg, was built with meticulous attention to energy consumption and carbon emissions. The result is a livable, walkable area with a relatively low environmental impact.

<sup>4</sup> One strategy commonly used in this swiftly developing country is to locate eco-city initiatives adjacent to existing industrial terrains. The theory appears to be that the new developments will offset existing associations with pollution and non-renewable energy usage. However, China's eco-cities also face serious threats from shifting political leadership and unsustainable financial incentives, and as a result, few of these projects have made it past the blueprint stage. See: Sino-Singapore Tianjin Eco-City: A Case Study of an Emerging Eco-city in China. Technical



Assistance (TA) Report. The World Bank, November 2009, p. ii.

**5** By definition, carbon neutrality means balancing the carbon (and sometimes also other greenhouse gases) released into the atmosphere with an equal amount of sequestered or offset carbon. How this is done, however, is up to the company in question. In some cases, the carbon is pumped underground. Sometimes trees are planted to 'offset' the carbon dioxide being pumped into the sky. In other examples, the concerned company or city simply pays a fee for 'carbon offsets'. Emissions trading (also known as the carbon market) is one of the key mechanisms of the Kyoto Protocol, an international agreement linked to the United Nations Framework Convention on Climate Change. This mechanism operates at the international level, with countries trading carbon credits much like a worldwide conference of baseball card collectors. The European Union also has an emissions trading scheme (the European Union Greenhouse Gas Emission Trading System or EU ETS), which has operated among the member states since 2005. On the other hand, the problems with the cap-and-trade system include a lack of oversight and control, as well as the fact that trees only sequester carbon dioxide until they are cut down and begin decomposition, at which point the CO<sub>2</sub> stored in the wood is once again released into the air.

on the future and money to spend. With politicians on board, eco-cities have blossomed across the continent.

Although there is no standard to quantify what exactly an eco-city must be, there are certainly some trends, and the contemporary eco-city wants you to *know* it is an eco-city. As a marketing feature, eco-cities usually have one thing in common: they're green. Literally. Grass rooftops, large public gardens or parks, wetlands and trees help to visually communicate the city's pedigree. Today's eco-cities are also characterized by a surfeit of solar panels. In some cities the roofs are papered with photovoltaics, in others there are fields of glittering blue panels surrounding the development. In Masdar City, an eco-city in Abu Dhabi currently under construction, a necklace of 88,000 monocrystalline and thin-film panels encircles the city.

Many eco-cities also incorporate water as both a pragmatic and aesthetic urban component, providing another connection to the natural world. To be successful, contemporary eco-cities must take into account not only carbon dioxide emissions, but an entire range of factors including public green space, waste management, water systems, energy efficiency and sustainable public transport options. Some of the trendy components of eco-cities are zero-emission public transport systems, zero-energy buildings, sustainable urban drainage systems (SUDS), renewable energy sources (such as wind turbines, solar panels, or bio-gas created from sewage), xeriscaping (landscape design intended to conserve water), and natural ventilation techniques. These are the basic building blocks of an eco-city, but they are combined at different scales, with different goals, and with different degrees of success.

And yet even with the best intentions, eco-cities often fall prey to the limitations of budgets, or political stipulations, or human nature: very few people are willing to actually make sacrifices to reduce their carbon footprints. The truth is, eco-cities have to make it *easy* for their inhabitants to be green. This means incorporating basic urban planning techniques like pedestrian and bike paths, as well as new technologies like renewable energy sources and battery- or hydrogen fuel cell-powered transport options. It also means integrating age-old composting techniques into daily life to reduce organic waste, and making recycling quick and easy. If it doesn't cost time or money, almost everyone is willing to contribute to a sustainable society. The need for behavioral modification can therefore be a very real limitation for potential eco-cities.

The real problem with eco-cities is the same shortcoming that plagues 'sustainability', that is: terminology. These almost ubiquitous phrases remain uncomfortably vague. There is no international standard for 'eco-city' or 'sustainable city', and neither is there an internationally applicable set of indicators. Thus the following case studies—Tianjin Eco-city, PRC, Masdar City, UAE, and Zira Island, Azerbaijan—display great variation in

their approaches to creating sustainable urban environments. Quantifiable targets differ; social aims are varied, and even those goals that would seem to be clear-cut—like 'carbon neutrality'—fall victim to imprecision.<sup>5</sup>

In order to make eco-cities a quantifiable reality, there must be clear indicators for sustainable practices. Many groups have offered suggestions, ranging from private initiatives like *One Planet Living* to the British government. International design and engineering firm Arup, the United Nations Environment Program (UNEP), the UK-based Chartered Institute of Architectural Technologists (CIAT) and even the World Bank have each developed their own set of sustainability indicators (BREEAM, LEED and GBCAF are three of the most widely used building certification systems).<sup>6</sup> Each group offers suggestions for socially, economically and environmentally sustainable development, but the fact remains that such proposals are often not enforced, poorly monitored, or are simply ambiguous enough to embrace practices that are clearly not beneficial. An example of this would be sustainability indicators that are concerned only with the technical components of a development and provide no guidelines for users, leaving inhabitants free to come and go with Hummers rather than promoting carbon-neutral transport options. There is simply no universal standard for determining what an eco-city must achieve, and because of this ambiguity the public is vulnerable to misrepresentation and unplanned consequences.<sup>7</sup>

In the following examples, Tianjin, Masdar and Zira Island are all ambitious New Towns that claim to use the latest technologies to tackle the problems that plague humanity; a claim that is hugely appealing in our current global climate of doomsday predictions and apocalyptic natural disasters. As the first representative of a new breed of New Town planning, however, these cities will not be judged on ambitions, but results. Will they be able to counteract the effects of 200 years of industrialization and save us from imminent peril? Perhaps they will. Or perhaps we will have to forgive these cities for sometimes falling a bit short of our tremendous expectations. On a planet still hungry for fossil fuels, maybe this generation of eco-cities will have to settle for being a stepping-stone along the path to a truly 'sustainable' future.

**6** In fact, there are countless ways of measuring the sustainability of an eco-city. BREEAM, GBCAF and LEED are all building certification systems that promise to quantify the inherent 'green-ness' of constructed spaces. BREEAM stands for Building Research Establishment Environmental Assessment Method and is used in the United Kingdom and some European countries as a green building rating system. GBCAF stands for the Green Building Challenge Assessment Framework, a rating system used by more than 20 countries, including Korea, Italy and Brazil. LEED is an acronym for Leadership in Energy and Environmental Design and is used throughout the United States.

**7** "In most cases, though, these eco-labels don't certify a product as holistically green or attempt to make any observations about a product's sustainability or quality. While many consider green certifications to be overall stamps of approval, they are really only marks indicating that a product meets the criteria specified in the standard of a particular certifying or labeling body." See: *The Rise and Significance of Eco-Labels and Green Product Certifications*. Greg Zimmerman, Executive Editor, July 2005. <http://www.facilitiesnet.com/green/article/Certified-Green--3087>, retrieved on November 11, 2009.

**Client:**

Masdar-Abu Dhabi Future Energy Company (ADFEC), Mubadala Development Company

**Consultants:**

Cyril Sweet Limited, W.S.P Transsolar, ETA, Gustafson Porter, E.T.A., Energy, Ernst and Young, Flack + Kurtz, Systematica

**Expected residents:**

40,000

**Expected commuters:**

50,000 daily

**Date:**

2006-2020

**Status:**

Under construction

**Designer(s):**

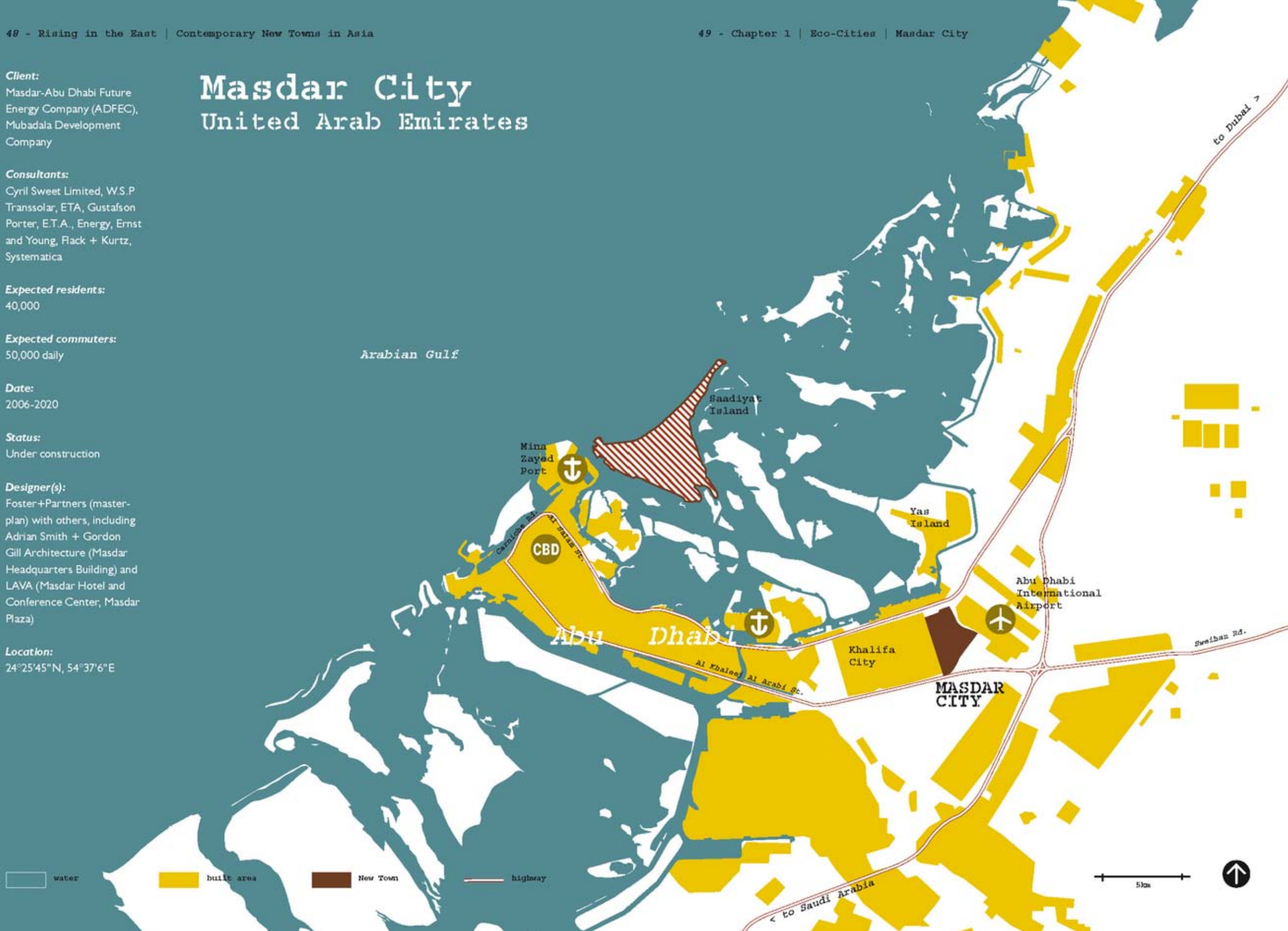
Foster+Partners (master-plan) with others, including Adrian Smith + Gordon Gill Architecture (Masdar Headquarters Building) and LAVA (Masdar Hotel and Conference Center, Masdar Plaza)

**Location:**

24°25'45"N, 54°37'6"E

# Masdar City

## United Arab Emirates



Arabian Gulf

Saadiyat Island

Yas Island

Abu Dhabi International Airport

Khalifa City

MASDAR CITY

Abu Dhabi

CBD

Mina Zayed Port

Al Khalifa St.

Sweihan Rd.

to Dubai >

< to Saudi Arabia

water built area New Town highway

5km





### From date farmers to Ferraris

For centuries, what is now the United Arab Emirates was a desert land populated by camel herders, fishermen, date farmers and pearl divers. The ungenerous climate encouraged few pioneers to settle, and the coast was dotted with mud shacks until late in the 18th century. In 1939, Sheikh Shakhbut bin Sultan al Nahyan granted petroleum concessions to a few eager foreign consortiums, allowing them to survey the region for oil. The foreign explorations were driven by the discovery of large Kuwaiti oil reservoirs in the late 1930s, but not a drop was found in the UAE until almost two decades later, in 1958. Upon discovery, Sheikh Shakhbut preferred to take a circumspect approach by strictly limiting the amount extracted from the reserves. His judiciousness was too cautious for other members of the ruling family and in 1966, (assisted by equally impatient British representatives), they orchestrated his replacement with his brother, Sheikh Zayed bin Sultan al Nahyan. Once Sheikh Zayed came to power, the rags-to-riches story began in earnest. Today, the average Abu Dhabi citizen is worth about \$17 million, making Abu Dhabi the richest city in the world.<sup>8</sup>

The fresh foundations of Masdar City sit along this same Persian Gulf coastline. The New Town is surrounded by a thin robe of urban fabric at the fringe of the desert interior.<sup>9</sup> Outside the paved and irrigated areas, nomads continue to trek. Although artists' renderings often depict the New Town as two adjacent squares placed arbitrarily in a no man's land of sand and scrub, in reality, Masdar City will be only 17 km southeast of downtown Abu Dhabi, and positioned amidst a quilt of wind and photovoltaic farms, research fields and plantations.<sup>10</sup> Although at the fringe of the city, the New Town is directly adjacent to Abu Dhabi International Airport.

As with any unbuilt project, it can be difficult to gauge the success of different aspects, but Masdar's goals are undeniably ambitious. The city's website lists the project's aims in no apparent order: "100% renewable energy; carbon-neutral city; zero waste... the world's greenest commercial buildings; centre of excellence in sustainable technology; global exemplar of sustainability research and development in practice; (and last but not least) partnerships of excellence."<sup>11</sup> Regarding partnerships of excellence, Masdar is certainly on the right track; the celebrated International Renewable Energy Agency (IRENA) will be based in the city and provide a center for further research on sustainable technologies.<sup>12</sup> Classes started at the Masdar Institute of Science and Technology (MIST) in September 2009—in cooperation with the Massachusetts Institute of Technology (MIT)—and Masdar already has established partnerships with big names like Credit Suisse and Siemens AG.<sup>13</sup> For some of the other goals, success will have to be judged over time.

### An intricate web

The story of Masdar City is inevitably tied to the now-famous allegory of Abu Dhabi. As the fortunes of this emirate state have multiplied, so

<sup>8</sup> This average net worth only applies to Emirati citizens, and therefore doesn't account for the one million foreign workers employed in the city. <http://abcnews.go.com/GMA/story?id=3759878>, retrieved on September 20, 2010.

<sup>9</sup> The seven states (or emirates) that make up the UAE are Abu Dhabi, Dubai, Sharjah, Ajman, Umm al-Quwain, Ras al-Khaimah and Fujairah. Masdar City is located in Abu Dhabi, the largest state as well as the country's center of political and economic administration.

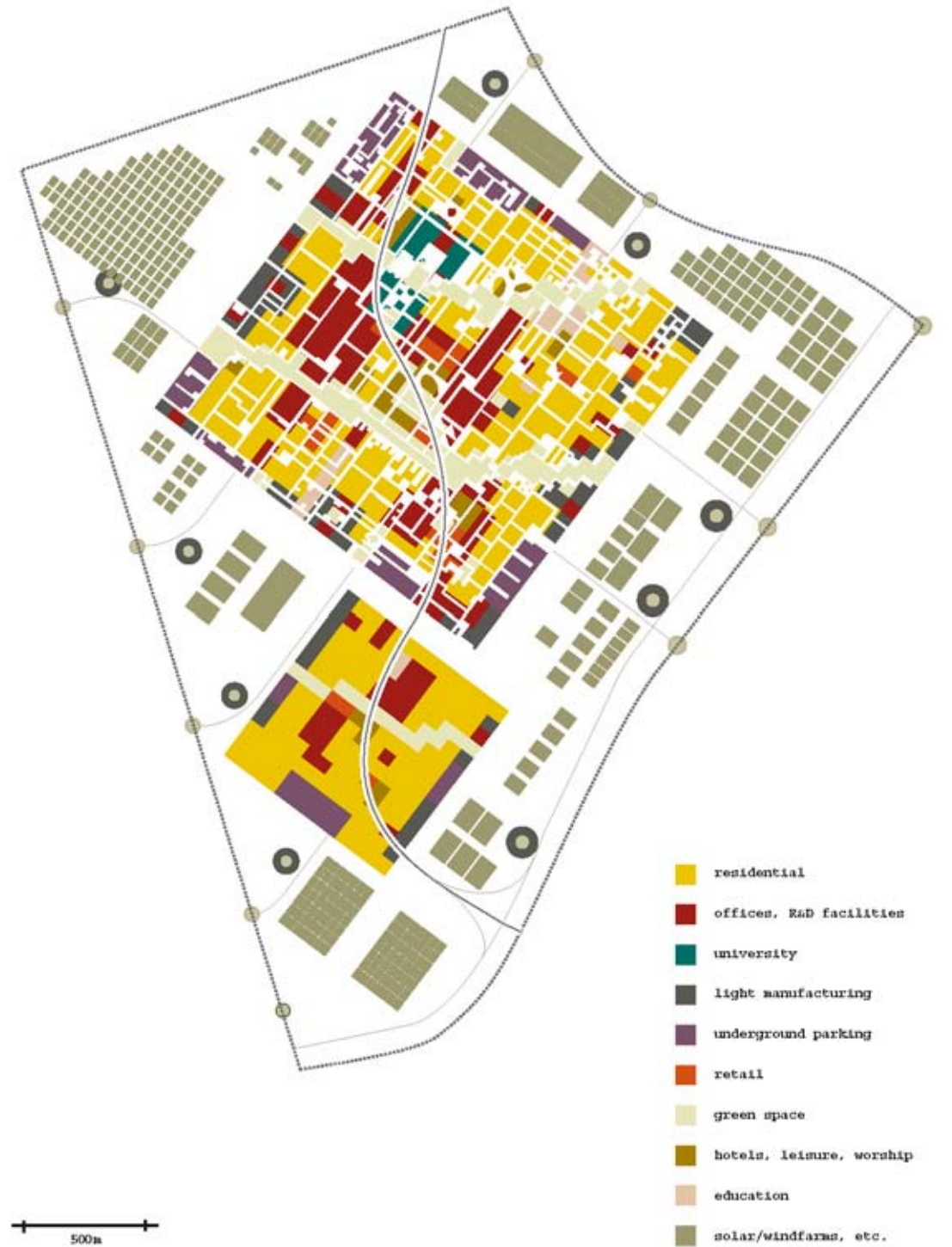
<sup>10</sup> <http://www.fosterandpartners.com/Projects/1515/Default.aspx>, retrieved on October 20, 2009.

<sup>11</sup> <http://www.masdarcity.ae/en/index.aspx>, retrieved on October 5, 2009.

<sup>12</sup> By incorporating IRENA in Masdar City, Abu Dhabi has clearly achieved a coup. The International Renewable Energy Agency has been mandated by 137 countries worldwide, making it the premier global voice for renewable energies. By becoming the hometown for such a prestigious agency, Masdar gains credibility on the world stage. However, more recently, the relationship has become strained. While Abu Dhabi seems set on pursuing nuclear energy, IRENA has been a consistently vocal critic of nuclear sources. Tensions rose when former IRENA Director Helen Pelosse quit in late 2010, forcing IRENA to appoint an interim director in her place. Her departure was surprising, given that weeks before resigning Pelosse told local media representatives she planned to stay with the agency long term. Pelosse has, however, publically opposed both nuclear energy and carbon capture and storage (CSS); both strategies have been embraced by the UAE. See: <http://www.irena.org>, retrieved on October 10, 2009, and Yee, A. "Abu Dhabi nuclear authorities train own pool of skilled workers", *The National*, April 3, 2011.

<sup>13</sup> Although classes began in late 2009, the students worked in temporary spaces at The Petroleum Institute until the campus in Masdar City opened in September 2010.







<http://www.masdarctf.com/partners.htm>, retrieved on October 22, 2009.

**14** Tatchell claims that, “Dubai’s misfortune is a long-awaited opportunity for Abu Dhabi and it is positively glowing with schadenfreude. It has watched its wayward neighbour squirm as its global property and investment markets are exposed and is poised to assert its position. The bailout symbolises the start of a push for regional supremacy, a changing of the guard in the United Arab Emirates.”

Tatchell, J., “Enough Glitzy Debt: Time for a Regime Change”, *The Times*, November 30, 2009. [http://www.timesonline.co.uk/tol/comment/columnists/guest\\_contributors/article6936966.ece](http://www.timesonline.co.uk/tol/comment/columnists/guest_contributors/article6936966.ece), retrieved on January 7, 2010.

**15** The completion of the Burj Dubai was delayed by various factors. As the global economic crisis forced the real estate sector into decline, the Emirate faced a debt of \$150 billion, mounting foreclosures, and increasing vacancies. The Emirate was eventually forced to take a public \$10 billion bailout from neighboring Abu Dhabi. At the opening of the Burj Dubai on the evening of January 4, 2010, Sheikh Mohammed bin Rashid al-Maktoum ceremoniously drew back a curtain to reveal the tower’s plaque with the name Burj Khalifa Bin Zayed engraved on it. The surprise move caused many to question just how much influence Abu Dhabi now had in Dubai. See: [http://business.maktoob.com/20090000414838/Burj\\_Dubai\\_renamed\\_Burj\\_Khalifa\\_Article.htm](http://business.maktoob.com/20090000414838/Burj_Dubai_renamed_Burj_Khalifa_Article.htm), retrieved on September 22, 2010.

**16** <http://www.masdarcity.ae/en/index.aspx>, retrieved on September 22, 2010.

**17** Khalifa bin Zayed al Nahyan replaced his father as President of the United Arab Emirates in 2004. For more information on the current president see: <http://www.uaeinteract.com/government/zayed.asp>.

**18** <http://www.mubadala.ae/en/category/media/factsheet/>, retrieved on September 20, 2010.

**19** <http://www.masdarctf.com/jaber.htm>, retrieved on October 22, 2009.

has the spotlight drifted south from glamorous Dubai down the coast to neighboring Abu Dhabi. With Dubai now facing bankruptcy and a stifled construction industry, Abu Dhabi has seized the opportunity to carve out an identity in contrast to Dubai’s spendthrift ways. In 2009, Abu Dhabi injected no less than \$10 billion to counter Dubai’s soaring debts. This turn of events has led some analysts to claim that Abu Dhabi is making a play for power, and Dubai’s misfortunes may present Abu Dhabi with the chance to take political control of the region.<sup>14</sup> Nowhere was the brotherly competition between the two Emirates more obvious than when Sheikh Mohammed bin Rashid Al Maktoum’s ‘Burj Dubai’—the highest tower in the world—was renamed ‘Burj Khalifa’ in honor of Abu Dhabi’s leader.<sup>15</sup>

The United Arab Emirates is made up of seven absolute monarchies, including Abu Dhabi and Dubai. The president of the UAE is head of state and the prime minister is considered head of government. Together with the Supreme Council, they are responsible for the executive, legislative and judicial branches of government. In this case, government involvement reaches directly to the development of Masdar City. According to the city’s website, “Masdar is the expression of a vision: the vision of His Highness Sheikh Mohammed bin Zayed al Nahyan, Crown Prince of Abu Dhabi and Deputy Supreme Commander of the UAE Armed Forces.”<sup>16</sup> Sheikh Mohammed also serves as special advisor to the president of the UAE—his older brother Khalifa.<sup>17</sup>

This vision is being brought to reality by the Mubadala Development Company, which functions as the UAE government’s investment vehicle. Mubadala Development Company is a state-owned Public Joint Stock Company with a multi-billion USD portfolio.<sup>18</sup> They were responsible for commissioning Masdar City in 2006, along with their subsidiary, Masdar-Abu Dhabi Future Energy Company. Dr. Sultan Ahmed Al Jaber is an advisor to the Mubadala Development Company, as well as CEO of Masdar City’s other client: the Abu Dhabi Future Energy Company (ADFEC). According to the website for the Masdar Clean Tech Fund (a “\$250 billion diversified venture capital investment vehicle”), Al Jaber is the Chief Executive Officer of ADFEC which is “mandated by the government to undertake and drive the Masdar Initiative.”<sup>19</sup> Ranked number fourteen on the list of the *World’s Most Influential Arabs 2009*, Al Jaber is directly responsible for the project’s development and execution.<sup>20</sup> In 2010, Al Jaber was appointed as the UAE Special Envoy for Energy and Climate Change, and as such he carries much of the responsibility for shaping the UAE’s international position on climate and energy-related issues.

The interests at stake in Masdar City are therefore clearly tangled with government control. The financial and political motives overlap in a multitude of ways. At its core, Masdar is presented as a challenge to Abu Dhabi’s global image as an emirate slathered in fossil fuels. Domestically, the New Town is marketed as a development that is in everyone’s interest: a more diversified economy is a high priority for the whole country,

especially if they wish to maintain the remarkable growth rates of the past decade. While the recent liberalization of the property market led to a huge boom in development and construction (first in Dubai, and later in Abu Dhabi), this industry has suffered hugely as a result of the global economic crisis.<sup>21</sup> It also remains clear that an oil-based economy and a largely expatriate work force will be continuing challenges for the United Arab Emirates.<sup>22</sup> Masdar City, however, represents one of many attempts to overcome these challenges and further develop a country that already has one of the highest standards of living in the world. In fact, Masdar City marketing material explicitly states that the development is designed to support the key goals laid out in the Abu Dhabi Economic Vision 2030. These key goals include “increasing the non-oil share of the economy from approximately 40% to more than 60% and significantly diversifying the scope of economic activity to include priority sectors such as education, banking & finance, tourism, pharmaceuticals, media, aviation & aerospace, transportation & logistics, and manufacturing in areas such as aluminum and petrochemicals.”<sup>23</sup>

## Where foreigners outnumber the natives

The United Arab Emirates have a famously diverse demographic, with an estimated 70% of the population foreign-born.<sup>24</sup> This ethnic diversity requires some level of tolerance for foreign cultures and the UAE enjoys a reputation for being more socially liberal than some of its Gulf neighbors. But unlike glitzy expat-packed Dubai, Abu Dhabi has a history of fierce kinship. Part of the reason the real estate boom largely skipped Abu Dhabi was the strict ownership laws regarding property. Until 2005, only UAE nationals could own, buy, sell, or rent real estate. This all changed with Law No. 19. The long-awaited Law No. 19 gives foreigners the right to own apartments or even entire floors in buildings within designated Investment Zones. It also allows foreign nationals to lease property owned by others for a period of up to 99 years.<sup>25</sup> Another major change made by the law was the new right to *Musataha* (the right to build and develop on someone else’s land) for up to 50 years. The right to *Musataha* is perhaps the most significant allowance made by Law No. 19 because it allows non-citizens to build on Abu Dhabi land. The foreigners cannot, however, own the land itself. In this way, Abu Dhabi has cleverly ensured the future of its real estate will remain firmly in local hands.

As with many contemporary Asian New Towns, however, concern has been voiced among Western critics that Masdar City will become an enclave for the wealthy, rather than a socially diverse urban environment. The social issues of land use in the Arabian Peninsula are notoriously complex, and according to architect and urban designer Christopher Choa, “there is some resistance to creating mixed-income communities.”<sup>26</sup> This is further complicated by Abu Dhabi’s population: locals have a reputation for being more conservative and religious than their more ‘Westernized’ neighbors in Dubai. Advertising generally targets traditional Islamic families rather than the wine-drinking couples wearing blue jeans

**20** <http://www.arabianbusiness.com/power/100/profile/1010>, retrieved on October 22, 2009.

**21** <http://www.arabianbusiness.com/565384-42-think-uae-economy-will-be-suffer-further-in-2010>, retrieved on October 22, 2009.

**22** <https://www.cia.gov/library/publications/the-world-factbook/geos/ae.html#Econ>, retrieved on October 22, 2009.

**23** <http://www.masdarcity.ae/en/86/about-masdar/>, retrieved on April 11, 2011.

**24** The majority of these residents are Indian, Pakistani, or Bangladeshi, but there are also a significant number of inhabitants originally from Sri Lanka, the Philippines and other Arab nations. For more information see: <http://www.migrationinformation.org/dataHub/GCMM/Dubaidatasheet.pdf>, retrieved on October 20, 2009.

**25** This is called usufruct.

**26** <http://www.treehugger.com/files/2008/03/masdar-roundtable.php>, retrieved on October 20, 2009.

**27** The entire Vision 2030 makes for interesting reading. See: <http://www.upc.gov.ae/en/Vision2030/Mandate.aspx>, retrieved on December 1, 2009.

**28** <http://www.dezeen.com/2009/08/28/masdar-city-centre-by-lava/>, retrieved on October 22, 2009.

that often appear on billboards in Dubai. The relative uniformity of the 420,000 Abu Dhabi citizens, however, is offset by an immigrant population of more than one million from various parts of the world, with hugely varying income levels.

In an effort to reduce the tensions, the Abu Dhabi Urban Planning Council lists mixed-income residential districts as a priority for the 2030 Plan.<sup>27</sup> Prioritizing social diversity on a small scale is an unusual step for Abu Dhabi. Although foreigners with enough money might live next door, the extremes of the social strata are certainly not expected to mix. For instance, Masdar City is already a walled city; it will likely become a gated community as well. In fact, it would be *more* unusual if Masdar was imagined as an open design. In Abu Dhabi, as in many of the following case studies, spatial segregation is embraced as a way of ensuring social harmony.

From an urban design standpoint, the question is rather: will this development actually function as a semi-autonomous New Town, or will Masdar be a supporting player for downtown Abu Dhabi? Skeptics point to the basic program of the city center as an indication of the latter option. The heart of the New Town, Masdar Hotel and City Center (known as MHCC) is dedicated to “shopping, leisure and entertainment. The mixed-use development will consist of a five-star hotel, long-term stay serviced apartments, a conference centre, a themed entertainment centre, cultural facilities related to future energy and shopping centre complete with a food court and cinema.”<sup>28</sup> Such a commercial slant seems clearly intended to attract the wealthy, rather than stimulate a richly diverse population. If Masdar proceeds as planned, it will almost certainly develop as a class phenomenon, but again, this type of spatial segregation is largely the norm throughout the Gulf. As in most of the case studies presented in this book, middle- and upper-class buyers are attracted to the implications of privacy, security and luxury that follow from physical boundaries and a neighborhood of like-minded peers.

The question of autonomy or dependence is more complex. As the world watches Masdar develop, this so-called ‘city’ is marketed as a super-sustainable world unto itself. The brochures and marketing material very rarely give mention of Abu Dhabi at all, leading readers to intuit that this development will be independent of its mother city. One begins to doubt Masdar’s autonomy, however, as a result of projected numbers like 40,000 residents and 50,000 commuters. Masdar is also within the municipal boundaries of Abu Dhabi. Reading between the lines, it seems questionable to call Masdar a ‘New Town’, and even more dubious to call this clean-tech cluster a ‘city’.

### A bold vision in a hot place

New town or not, Masdar is masterplanned by Foster + Partners, an architectural firm based in London with plenty of experience designing planned communities. In Masdar City, the design firm has organized the



Masdar City is located between the new Khalifa City, a residential development, and the Abu Dhabi Airport. Designed by Foster + Partners in 2006, the fields of solar panels and supporting industries are shown around the two main urban areas. Plans for a light rail to connect the New Town to downtown Abu Dhabi are still in the works. An underground Personal Rapid Transit (PRT) system reduces the need for cars (parking is located at the entrances to Masdar City).



**29** <http://www.fosterandpartners.com/News/291/Default.aspx>, retrieved on October 20, 2009. The traditional Islamic walled city, (or medina) displays a very specific social usage of its urban space. In the medina typology, the mosque usually informs the political, social, judicial and religious spatial organization. See: Nomachi, K., Mecca, the blessed, Medina, the Radiant: the Holiest Cities of Islam. Aperture, New York, 1997.



Khalifa City, seen here during construction in 2010, adheres to a more prevalent architectural typology in Abu Dhabi. Villas rise independently of each other, protected by gates and yards. The ubiquity of the villa typology reinforces the contrast with Masdar City, which is one of the only developments in the area that uses dense, low-rise solutions to deal with urban questions.

**30** Todd Reisz clarifies these etymological subtleties in *Al Manakh*: "Translating souk to 'market' misses an urban nuance, because market implies a distinct space—like agora. Whereas agora implies the 'gathering, assembling' of unused space into a definable void or center, the souk's mercantile roots come from 'narrow' and 'street,' an attenuated alternative... easily inhabiting portions of the city... into underused space." *Al Manakh*, p. 239.

urban fabric into orthogonal blocks punctured by courtyards. The city's literature claims that the plan reveals clear influences from traditional Arabic urban planning, and so Masdar takes the medina and souk typologies as references for what is heralded as the first carbon-neutral city in the world. The design is intended to differentiate itself from the standard compilation of iconic forms rising in the various 'boomtowns on the beach'. For the past two decades, almost every Gulf city has defined itself with celebrity skyscrapers, to the point that the iconic aspect of these constructions has been totally lost. In this aspect, Masdar's dense, low-rise (limited to 20m by the Abu Dhabi Urban Planning Council) development stands in stark contrast to our expectations for a Gulf city, though it is no less iconic, with its strict square form and graphic bird's eye view. Masdar thus defines itself in opposition to Dubai's infamous jumble of monuments. Rather than reinforce an already crowded skyline, the eco-city's low building regulations highlight another familiar aspect of Arabian architecture: the articulate profile of minarets rising above the fray.

At the urban level, the pedestrian streets make up a shifting grid system, which is then further broken down into function-related areas (residential, hydroelectric power station, commercial, etc). The 6 km<sup>2</sup> quadrangle is cut diagonally by a gently curving road which creates a linear open space between the two halves. This central line is punctuated with parks and public urban areas, although most of the city maintains a more compressed spatial organization. The neighborhood unit is made up of a series of *fareej*, the smallest Emirati residential block. This further nod to traditional planning techniques reveals the

heavy influence of the extended family on Emirati culture. The blocks are designed around courtyards, accessed by a single cul-de-sac road. This single entry and exit point makes it rather unlikely for uninvited guests to casually move into one of the *fareej*, again reinforcing cultural expectations of privacy and seclusion. Pedestrian walkways pierce each block at the corners, providing access along these *sikka*, or narrow, shaded paths.

Clearly the design makes sense in terms of its connections to the climate—it must. In overheated Abu Dhabi, shade is a precious commodity. To help meet this need, the designers wisely reduced those infamously broad Gulf road widths and focused on pedestrian connections. This condensed plan deliberately evokes "the tightly planned, compact nature of traditional walled cities,"<sup>29</sup> a typology that was originally based on Medina, a holy city in Saudi Arabia and home to the prophet Muhammed from 622 until 633 CE. A medina (which is literally translated as 'city'), or souk style interprets the marketplace as both social and economic urban center.<sup>30</sup>

Although Medina's city walls were originally built as fortifications, in Foster's eco-city the defenses have been interpreted as an aesthetic delineation between desert and oasis, urban and rural. In this design, the city wall serves as a constraint against urban sprawl. By strictly confining the limits of the built environment, the planners intend to force urban densification rather than allow unchecked expansion.<sup>31</sup> A promotional video by Foster + Partners asks us to "imagine an environment combining the magnificent piazzas of southern Europe with the intricate networks of shaded pedestrian streets of Arabian cities."<sup>32</sup> What they intend is basically a series of spaces that repeatedly open to frame views, then contract to define urban rooms. We can imagine that in such a brutally lit location, this play between 'open' and 'closed' is made elegant by the glittering tiles, articulated shadows and a continuous contrast between light and dark. Such a claustrophobic pedestrian circuit would be stifling in a less extreme environment; in Masdar, these confined spaces set up our expectations for the open public space.

In the largest of these openings, the Australian-based architecture firm Laboratory for Visionary Architecture (LAVA) has designed Masdar Plaza (with the accompanying Masdar Hotel and Conference Center—a 'public space' in its own right) as the urban core; it is the main public space within the city. LAVA envisions the area as the 'Oasis of the Future', as well as "the social epicenter of Masdar, opening 24-hour access to all public facilities. Interactive, heat-sensitive technology activates low-intensity lighting in response to pedestrian traffic and mobile phone usage."<sup>33</sup> The futuristic technologies are countered by the nostalgic urban design. In this city, weird, blooming air funnels reach up between sandy-colored orthogonal structures that recall the traditional houses of the region.

In Masdar, the souk concept gets another update in Adrian Smith + Gordon Gill Architecture's Masdar Headquarters Building. The design features a large central area with multiple tube-like structures that reach up through the building's six stories to supply daylight and circulate air. The building contains an elaborate program: residences, a prayer hall, retail space, public and private courtyards, green space and community gardens. In order to expedite 24-hour shopping (rather than the traditional evening commercial activity), the Headquarters Building is designed to siphon cool air down into the ground level retail areas.<sup>34</sup>

Historically, the unforgiving climate was one of the chief influences on vernacular architecture in Abu Dhabi. With limited materials available, *barasti* housing was constructed from palm fronds, with great attention to ventilation and privacy. Tents that could be easily transported were also

**31** Some might argue that the regulations are also about protecting Foster's design as a pristine whole. See: <http://www.fosterandpartners.com/Projects/1515/Default.aspx>, retrieved on October 20, 2009.

**32** <http://www.youtube.com/watch?v=YJLIug-PU9g&NR=1&feature=fwp>, retrieved on October 20, 2009.

**33** LAVA is a relatively young firm, (begun in 2007) but the competition-style selection for different areas of Masdar seems to be an attempt at democratizing the city's resulting architecture. <http://www.worldarchitecturenews.com/>



Downtown Abu Dhabi has a different architectural character from Masdar's new-Arabian style. High-rise office buildings in muted colors line the streets and cars clog the main arteries. A light film of dust covers everything.

[com/index.php?fuseaction=wanappln.projectview&upload\\_id=12248](http://www.fosterandpartners.com/index.php?fuseaction=wanappln.projectview&upload_id=12248), retrieved on October 18, 2009.

**34** An article on the Headquarters Building boasts: "In addition to being the first mixed-use net energy project in the city, the new Masdar headquarters will be the lowest energy consumer per sq ft for a Class A office building in a desert climate. It will feature one of the world's largest photovoltaic arrays, employ the largest solar thermal driven cooling and dehumidification system, and be the first building in history to

Masdar City slowly rises  
behind construction fences,  
2010.







This interior rendering by Foster + Partners reveals the various ambitions of the New Town: through the windows, a mosque vies with windmills for dominance over the skyline. A chic couple stands on the balcony, contemplating the view, while inside, what looks like a Dale Chihuly chandelier hangs in the kitchen and Casablanca plays on the television.



generate power for its own construction.”

[http://www.worldarchitecturenews.com/index.php?fuseaction=wanappln.projectview&upload\\_id=2298](http://www.worldarchitecturenews.com/index.php?fuseaction=wanappln.projectview&upload_id=2298), retrieved on October 17, 2009. The architects' YouTube video climaxes with the image revealing the building's net energy production of +3%, (although how they come to this figure is somewhat mysterious). [http://www.youtube.com/watch?v=TA\\_Hkv42B4o](http://www.youtube.com/watch?v=TA_Hkv42B4o), retrieved on October 20, 2009.

**35** <http://www.masdarcity.ae/en/index.aspx>, retrieved on October 23, 2009.

designed and oriented to alleviate the harsh environment. In the early 20th century, courtyard houses were constructed with thick, insulating walls and small pierced openings to control internal air circulation. The scarcity of materials meant that buildings were constructed with an adobe mixture reinforced with palm fronds and burlap, and often used coral harvested from the sea as building blocks. The traditional style is focused on the interior courtyard, reserving the opulence of colorful tiles and splashing water for the extended family unit. In Masdar, the designers have mixed this typology with an abundance of design details. Delicately patterned brise soleil hover above the streets, creating spaces with arabesque motifs slowly moving across the surfaces in light and shadow. It's a familiar move. In recent years, designs combining historic vernaculars with contemporary technologies have become a pervasive style. In Masdar, it remains to be seen whether this juxtaposition will be successful; artists' renderings continuously separate the two styles, and the somewhat indecisive move to fuse historic references with state-of-the-art equipment seems to signal a sort of identity crisis. The question remains: can contemporary Arabic architecture be successfully designed by British architects?

### Sustainability and the city

Masdar City is marketed as “the world's first carbon-neutral, zero-waste city, fully powered by renewable energy.”<sup>35</sup> That's a mouthful. Let's start with 'carbon neutral'. Carbon neutral is one of those ambiguous phrases that can actually mean any variety of things. Industries (or New Towns) can buy carbon credits, a practice called 'carbon offsetting', which ultimately achieves a mathematical carbon neutrality for the buyer. Basically, the formula is: we produce carbon, so we'll pay you to plant some trees to offset its impact on the atmosphere. The potential leniency of this practice

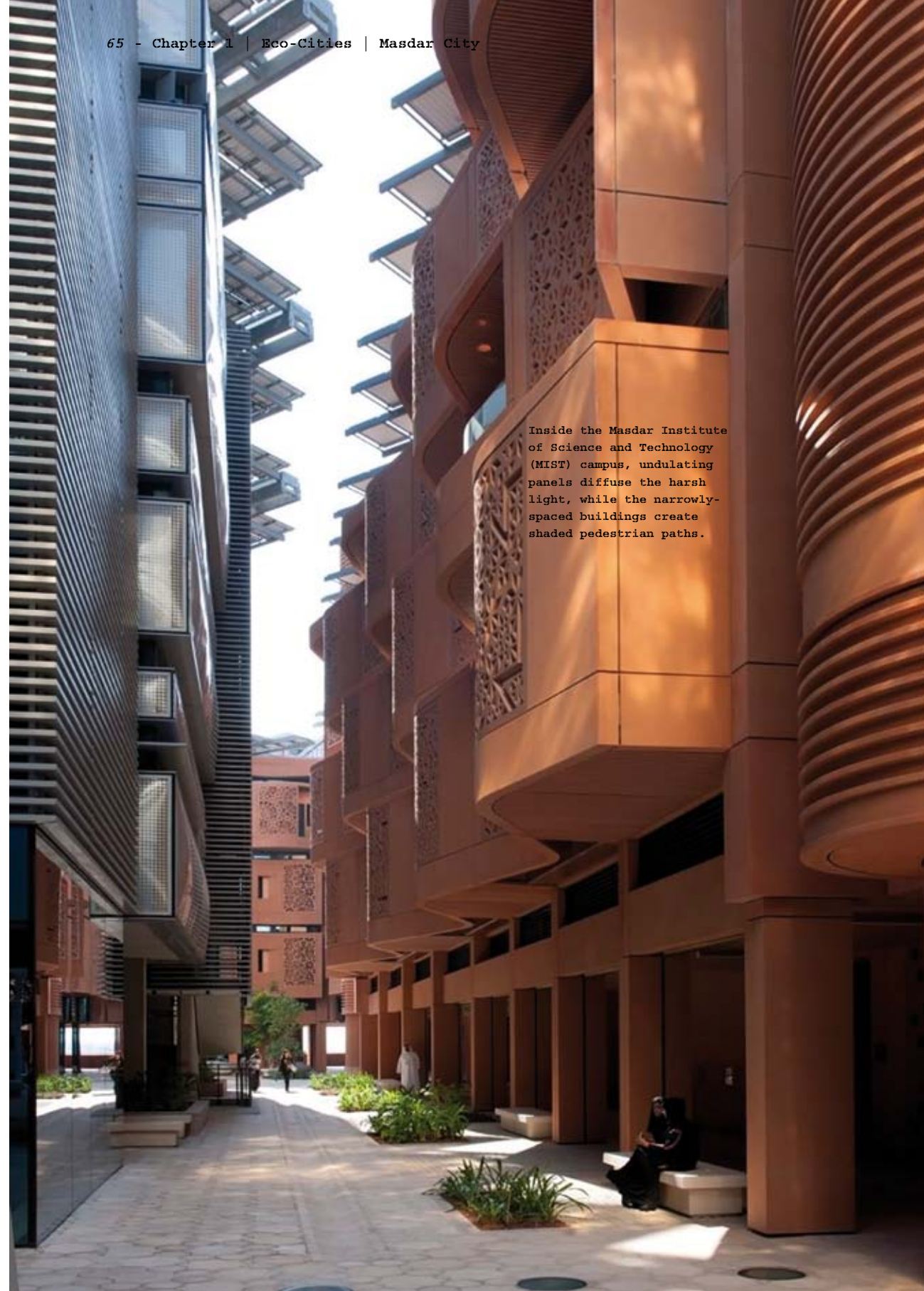
has increasingly been called into question. Another way to achieve carbon neutrality is by balancing the carbon dioxide produced by using an equal amount of energy from renewable sources. This is either accomplished by compensating for the CO<sub>2</sub>, or by using only renewable energies. In Masdar, the ambitious aim is to use only renewable energies. The development was planned to bypass the more forgiving 'carbon neutral' status, and target *zero carbon emissions*.

At least, that was the plan. Since the global economic crisis, Masdar has been forced to prioritize. As of January 2010, that prioritization translated to a four-year construction delay, (completion is now scheduled for 2020 rather than 2016), a \$3.3 billion budget cut,

and the controversial decision to allow cars into the city. 'Car-free' now apparently means no gas-guzzling cars, but electric and hybrid vehicles



The MIST campus is part of the first construction phase. The roof is covered with solar panels and a low-tech wind tower. The simple construction uses age-old convection technology to pull cooling breezes into the courtyard.



Inside the Masdar Institute of Science and Technology (MIST) campus, undulating panels diffuse the harsh light, while the narrowly-spaced buildings create shaded pedestrian paths.



**36** Two of Masdar's most senior executives quit in early 2010. Ziad Tassabehji and Khaled Awad, Director of Innovation and Investments and Director of Property Development, respectively, both resigned for unknown reasons. Tassabehji was widely known as the 'founding father' of Masdar City and his departure came a surprise to many. The former directors were later replaced by Frank Wouters and Alan Frost.

**37** <http://www.masdarcity.ae/en/index.aspx>, retrieved on October 23, 2009.

**38** Ibid.

**39** Ibid.

**40** National Strategy for Environment and Health: United Arab Emirates (UAE). World Health Organization. 2 September 2007, p. 3. Another website breaks down the UAE's per capita waste production to "3.4 to 3.8 kg per day, is one of the highest in the world with 52% of the waste being food leftovers, 16% paper products, 14% is plastic, 7% is glass and the remainder tins, cloths and other products." From Bee'ah, the Sharjah Environment Co., the full text can be seen at <http://www.beeah-uae.com/en/whatyoucando/students/did-you-know>

**41** This figure is from 2009. <http://opmerkelijk.nieuws.nl/62161>, viewed on October 22, 2009.

**42** <http://www.masdarcity.ae/en/index.aspx>, retrieved on October 23, 2009.

**43** The United States Environmental Protection Agency claims that per capita water consumption averages 179 gallons (677 litres) per day in the United States. See: [http://www.epa.gov/smartgrowth/pdf/growing\\_water\\_use\\_efficiency.pdf](http://www.epa.gov/smartgrowth/pdf/growing_water_use_efficiency.pdf), retrieved on September 20, 2010. It is unclear, however, whether these figures include agricultural use. If so, obviously the implication that Emiratis are simply wasteful would be false. See also: [http://www.uaeinteract.com/docs/UAE\\_per\\_capita\\_water\\_consumption\\_550\\_litres\\_per\\_day\\_survey/30613.htm](http://www.uaeinteract.com/docs/UAE_per_capita_water_consumption_550_litres_per_day_survey/30613.htm), retrieved on September 20, 2010.

**44** "UAE per Capita Water Consumption

will be allowed within the walls. This shift, along with Abu Dhabi's decision to pursue nuclear energy sources, has put some strain on Masdar's internal organization, as well as its relationship with its most highly prized tenant, IRENA.<sup>36</sup>

In order to create a 'zero-waste city' Masdar will "operate with zero waste to landfill... no later than ten years after completion of the final phase."<sup>37</sup> Here's where things get a little sketchy. The final phase is set for completion in 2020, so we can assume this means there will be no waste dumped in landfills by 2030. Builders will construct the city "in a waste-neutral environment where construction wastes are offset through reusing locally derived construction waste materials."<sup>38</sup> We can interpret this to mean that the city is being partially built from the waste materials of other construction sites; a lofty goal, but one that leaves the claimant open to critique. Clearly not all the materials used in Masdar are recycled, and there is room for more questions regarding the energy use and pollution caused by transportation of these materials, as well as the embodied energy required to recycle these materials into usable goods. In fact, by declaring itself an 'eco-city', or 'sustainable city' or more ambitiously, 'zero-waste city', Masdar sets itself up to measured and weighed, and will always be found wanting. Masdar's series of 'prioritizations' in the wake of the economic crisis do nothing to curb this skepticism.

The city also claims that it will "minimize waste generation by 30% per person through behavioral changes, policies, and regulations."<sup>39</sup> Presumably, this means a decrease of 30% from the current annual average waste production of 730 kg per Emirati household (the UAE is one of the world's highest producers of solid waste).<sup>40</sup> A 30% reduction would still leave 511 kg per household per year—not a significantly 'eco' amount of waste when compared with the average Dutch household's annual production of 561 kg.<sup>41</sup> Masdar City claims that it will recycle 50% of its waste, convert 33% to energy (burn it), and compost the remaining 17%. The UAE currently deals with its waste by incinerating almost all of it, so this approach will signal a huge improvement in the country's waste management system.

As for water, the goal of Masdar City is to "reduce water use of residents to no more than 180 liters per capita per day, targeting further reductions to 146 l/c/d."<sup>42</sup> This is an ambitious goal for one of the world's greatest per capita water consumers. Although American citizens still use the most water with a staggering per capita average of 677 l/d, United Arab Emirates citizens are not far behind with average consumption at 550 l/c/d.<sup>43</sup> They are the world's second highest per capita water users, yet water consistently ranks as the issue of lowest concern in surveys conducted by the Environment Agency Abu Dhabi (EAD).<sup>44</sup> This, of course, makes the usage target of 180 l/c/d sound incredibly optimistic.

There is also a proposal to use Light Rail Transport to link Masdar to Dubai and other surrounding urban areas, so that (ideally) not one of the 50,000 commuters will have to use a car. If they do, parking decks are



Residential units form the sharp edge of Masdar's quadrilateral form. The space between the two squares is planted with greenery and in the distance we are once again presented with both mosque and windmills.



At the neighborhood scale (2.1km x 2.1km), the typical Emirati community houses about 10,000 people and includes two primary schools, a mosque, a park and a women's center.



If we zoom in on a "local cluster" (720m x 720m), the repeating pattern of the *fareej* becomes clear.



The smallest unit, the *fareej* (240m x 240m), clusters homes around a central courtyard, housing 125 people while ensuring privacy and slowed traffic patterns.



550 Liters per Day: Survey", UAE Interact. June 14, 2008.

45 Ibid.

46 Walsh, B., "The World's Newest, Greenest City: Can it work?" TIME, January 25, 2011.

47 Martyn Potter quoted in Walsh, B., "The World's Newest, Greenest City: Can it work?" TIME, January 25, 2011.

strategically located at various entrances, and a complimentary underground system will use Personal Rapid Transport (PRT) pod-like vehicles to move inhabitants around the city. The solar-powered pods will move under the city, leaving the streets free for pedestrians, cyclists, Segway users and electric cars. According to designer Luca Guala of *Systematica*, the vehicles will hold four to six passengers and respond to a central supervisory system which will give instructions like "take your passengers from A to B following the best route according to distance, travel time and traffic."<sup>45</sup> There are plans to compliment the PRT with a Freight Rapid Transit (FRT) system that follows the same underground pathways. These flatbed delivery vehicles are powered by lithium-phosphate batteries that provide trips of about 60 km after a 1.5-hour charge. So far, city planners have ordered two FRT vehicles and eight standard PRT, along with another two VIP PRT. After visiting Masdar in early 2011, Brian Walsh summarized the PRT system in the following way: "I can't help thinking there's something slightly silly about all this. For all the technology—which isn't cheap—the PRT has taken me to its one and only stop, maybe half a mile (800 m) from the starting point. For a lot less—and not much more time—I could have used a much older form of transport: my legs."<sup>46</sup>

The 6 km<sup>2</sup> area is surrounded by a buffer zone crowded with renewable energy technologies like wind farms and photovoltaic fields. The city itself is intended to be self-sufficient, producing materials and energy from these outer areas, much like a medieval European town with surrounding fields. The problem, of course, is scale. Masdar City will only house 50,000 people. If anything, the project smacks of model town syndrome: it risks becoming a sort of exhibit rather than a real urban experience. The potential to control residents' behavior is also an unrealistic advantage of the New Town's small scale. According to Martyn Potter, Masdar's director of operations and facilities, "most Abu Dhabi citizens are used

to keeping their air-conditioning as low as 60°F (15.5°C)—it helps that electricity is heavily subsidized—but in Masdar, AC needs to be set closer to 77°F (25°C) to keep within its efficiency targets." Because city officials and technicians can easily monitor every room in the New Town, keeping residents in line is a matter of 'name and shame.' As Potter says, "I'm a green policeman."<sup>47</sup>

Upon closer inspection, all the technology begins to feel gimmicky. When one considers the additional lifestyle changes required of residents, one might question just how sustainable Masdar really is—especially if someone decides to crank up the AC, and damn the social consequences.

Then again, the sustainable energy sources and

cutting-edge technologies are really just a sort of anecdote to the city's real message. Masdar is about Abu Dhabi's well-timed transition from oil-based economy to a more diversified system that is protected from price fluctuations per barrel. Masdar is a vehicle to attract the attention



Residents wait at the PRT station for individual pods.



The Personal Rapid Transit (PRT) system incorporated by Foster + Partners runs on magnetized pathways below the pedestrian level, leaving the ground plane unobstructed for the ambling masses.



48 <http://www.masdar.ae/en/Menu>, retrieved on July 2, 2009.

49 <http://www.copenhagenclimatecouncil.com/get-informed/solutions/masdar-city-making-the-middle-east-a-mecca-for-post-oil-technologies.html>, retrieved on October 22, 2009.

50 <http://www.treehugger.com/about/>, retrieved on October 20, 2009.

51 <http://www.treehugger.com/files/2008/03/masdar-roundtable.php>, retrieved on October 21, 2009.



One of the wind tunnels and cooling pools inside Masdar Headquarters.

of the world at a moment when sustainability and 'green design' is at the top of the global agenda. Abu Dhabi's well-publicized intentions regarding the shift have been proved with substantial recent investment in real estate, tourism facilities, and international events like the Abu Dhabi Golf Championship, Abu Dhabi International Triathlon, the World Future Energy Summit and even the inaugural World Green Tourism Conference in December 2010.

The lack of strict environmental regulations has contributed to the UAE's exponential urban growth over the last 30 years. Foreign investors were eager to build in a country that boasted a liberal business climate and lax construction policies. This combination was further aggravated by the transition from an economy largely based on petroleum and natural gas exports to a more diversified market. Now, the Abu Dhabi Urban Planning Council has decided to take control of the spreading urbanization. Only one coastal chunk will remain open to construction, ringed by a 'Sand Belt' that is supposed to limit growth and prevent sprawl. This same technique is applied at a smaller scale in Masdar City by delineating the periphery with a thick wall. Outside of the wall lies the production area: fields of solar panels, wind turbine farms and agriculture will supply Masdar with sources of energy and food.

Masdar City also boasts "100% foreign ownership, zero taxes, zero import tariffs, zero restrictions on capital movement and among the strongest intellectual property protection in the region."<sup>48</sup> Yet it is clear that the project is *not* international in terms of its financing and banking. As pointed out earlier, "the Masdar Initiative is 100% owned by Mubadala Development Company – the investment and development branch of the Abu Dhabi government. And the bulk of that funding comes from big UAE and Abu Dhabi banks, including the National Bank of Abu Dhabi, Abu Dhabi Commercial Bank, Emirates Bank, and First Gulf Bank."<sup>49</sup> '100% foreign ownership' is also a curious tagline for a city that has deliberately zoned all future developments as 70% local and 30% foreign.

### 'Eco' doesn't always mean 'natural'

*Treehugger.com*, is a fairly well-known website describing itself as "a media outlet dedicated to driving sustainability mainstream."<sup>50</sup> In spring 2008, *TreeHugger* put together a panel of experts to gauge the truth behind the media hype over Masdar City. The website asked: "What kind of city will Masdar be? ...[It] would appear to be an extremely commercialized city populated by imported foreigners and totally disconnected from its local surroundings. Is this sustainable?"<sup>51</sup>

Author and eco-city expert Richard Register replied with a critique of the promotional material's use of the word *sustainable*: "That seems like an accurate statement to me. Sustainable? How could it possibly be? What on Earth could they mean by that? Maybe massive solar energy, once established, could run artificially refrigerated environments on the sun's energy, partially shaded, solar-cooled greenhouses producing food, fish farms also run on solar, boats on solar electricity and on and on after massive investments. But the kind of synthetic life there would seem unbearable to anyone who loves natural animals or plants. Very weird."<sup>52</sup> Although his analysis is not particularly unbiased, Register makes a point about the strong disconnects between what is meant by *natural* as opposed to *sustainable*. Most eco-cities promote their natural context; in the case of Masdar City, the natural context must be wholly negated in order to create livable conditions for its inhabitants.

But Masdar is fascinating precisely because of these spectacular ambitions. Critics may question the ultimate 'sustainability' of a New Town built in the desert, but the attempt should be applauded. Masdar City gives us something to strive for: a contemporary utopia in a global climate of economic downturn and crushed dreams. Masdar City—unbuilt, unfinished—embodies our collective hopes for the future: a city built by oil money in an attempt to live without it. The ultimate goals of the initiative sensitively combine ecological, financial, and technological considerations—albeit on a very small scale. With soaring music in the background, the developer's promotional video ends with the words, "one day, all cities will be built like this."

As a recent article in the online version of *Popular Science* magazine concluded, "It is an exceptionally ambitious project, but if any nation can do it, it's likely the UAE: a country which has proven that ambitious projects are not insurmountable challenges. Still, whether this project is a serious look at sustainability or an exceedingly expensive public relations display remains to be seen."<sup>53</sup> The reality of Masdar's future is also somewhat underwhelming after the years of soaring rhetoric. In October of 2010, Masdar pushed back development nine years—putting completion between 2020 and 2025. By the end of 2010, there were just 35,000 m<sup>2</sup> of construction floor area. As of spring 2011, the Masdar Institute of Science and Technology campus was open and functioning, with 170 students and 40 faculty members. A sushi bar, Caribou Coffee®, organic market, laundry service, bank and some other businesses were also open around the campus. The Masdar HQ Building and The Courtyard Building are the next construction projects scheduled for completion in 2013. As Al Jaber framed it, Masdar is "not going to be tied into a rigid timeline."<sup>54</sup> This might be interpreted as an indication of the New Town's fragile future.

52 <http://www.treehugger.com/files/2008/03/masdar-roundtable.php>, retrieved on October 21, 2009.

53 <http://www.popsoci.com/environment/article/2008-03/welcome-masdar-city>, retrieved on October 16, 2009.

54 Stanton, C., "Masdar City overhaul cuts \$3.3 billion from costs", *The National*, October 11, 2010.

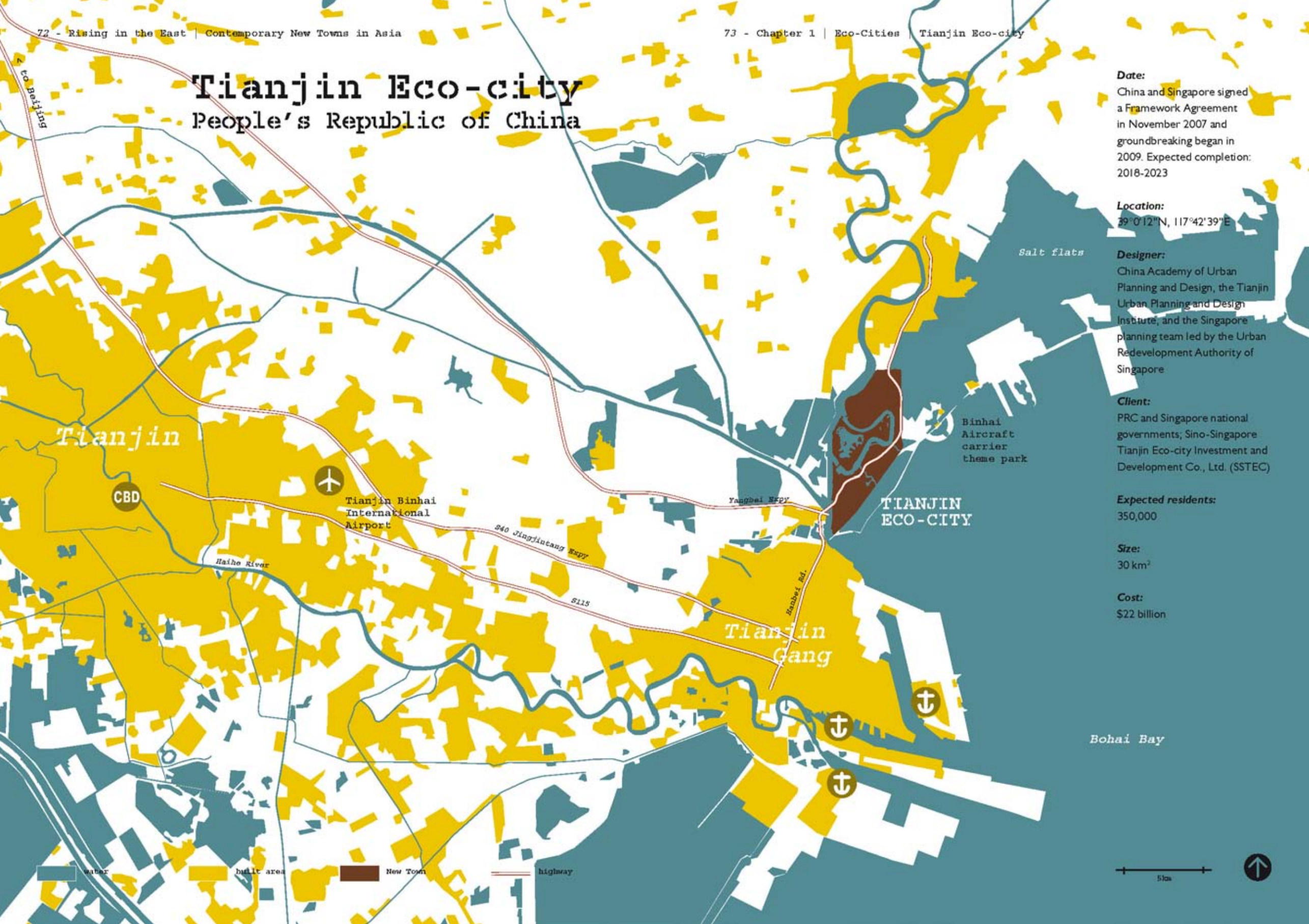


With the structures unfurled, Masdar's central plaza becomes an enjoyable outdoor space during the day. At night, the umbrella-like forms close and provide lighting for the public space.



# Tianjin Eco-city

People's Republic of China



**Date:**

China and Singapore signed a Framework Agreement in November 2007 and groundbreaking began in 2009. Expected completion: 2018-2023

**Location:**

39°0'12"N, 117°42'39"E

**Designer:**

China Academy of Urban Planning and Design, the Tianjin Urban Planning and Design Institute, and the Singapore planning team led by the Urban Redevelopment Authority of Singapore

**Client:**

PRC and Singapore national governments; Sino-Singapore Tianjin Eco-city Investment and Development Co., Ltd. (SSTEC)

**Expected residents:**

350,000

**Size:**

30 km<sup>2</sup>

**Cost:**

\$22 billion

Bohai Bay

Binhai Aircraft carrier theme park

TIANJIN ECO-CITY

Tianjin Gang

Tianjin

CBD

Tianjin Binhai International Airport

Haihe River

S40 Jingjintang Expwy

S115

Binbei Rd.

Yangbei Expwy

water

built area

New Town

highway

50m





The eco-city (represented here by a red dot) is part of a strategy to urbanize and upgrade the extremely polluted Bohai Bay coastline. The fattest purple arrow indicates a desire to improve the connection between the more interior Tianjin and the industrial and port areas lining the bay.

### A city in the salt flats

The strange tale of the Sino-Singapore Tianjin Eco-city began in early 2007 when Singapore's Senior Minister, Goh Chok Tong, took the opportunity provided by a state visit to China to propose a collaboration between the two governments in the form of a city which could provide a model for sustainable development.<sup>55</sup> Chinese Premier Wen Jiabao found the proposal intriguing, as it fit perfectly with the government's professed intentions to shift China's industry-based economy towards a more sustainable trajectory.<sup>56</sup>

Dozens of Chinese cities lobbied to be the home of the future eco-city when the project was first announced. Being chosen, after all, would mean a massive overhaul of existing infrastructures as well as a huge financial injection. As one of the country's first eco-cities, the designation would also mean renewed appeal in the real estate market and potential windfalls from the growing eco-tourism sector. Competition was fierce. Government officials eventually chose Tianjin, a sprawling metropolis of more than 12 million, from among the four cities which made it to the final round.<sup>57</sup> Their choice was based on various criteria, including a proviso that the site should not be located on agricultural ground, and must lie in an arid region with drought tendencies. Out of the final four, Tianjin was chosen for its heavily polluted land and serious water shortage problems. The idea was that an eco-city constructed in a harsh environment could provide a working model for future developments in any kind of landscape.

Tianjin Eco-city is therefore built on a 'wasteland' of salt flats and marshes on the coast of the famously polluted Bohai Bay, 40 km southeast of downtown Tianjin. The land, though useless for agriculture, has been used for centuries as salt farms. The surreal landscape of geometric salt pans shimmers in the sun and stretches to the horizon, ending in a nightmarish industrial skyline. Images from the area are something from Dante, with fiery chimneys and a glowing orange sky reflected in the shallow salt pans. The chemical industries to the north and south of the new city are some of the worst polluters in the region, and Tianjin Eco-city is seen as a symbolic antidote to these monstrous terrains.

Despite Tianjin Eco-city's scale and ambition, the New Town makes up only a small part of the massive development planned for this section of the Bohai Bay coastline.<sup>58</sup> Eventually, the northern industrial areas will be pacified, and the land adjacent to Tianjin Eco-city will become a coastal leisure and tourism zone. The area directly south of the eco-city will, however, still be used for shipping logistics, petrochemical industries, and port-related activities. As part of the regional development scheme, a new coastal

<sup>55</sup> Keppel Corporation Limited reported on this historic meeting in their "Report to Shareholders 2007". A pdf version can be found online at [http://www.keppelcorp.com/kcl\\_eAR/2007/features/ecocity.asp](http://www.keppelcorp.com/kcl_eAR/2007/features/ecocity.asp)

<sup>56</sup> Because China is currently forced to import oil, iron ore and food, the economy is often dependent on financial injections from the state. In this context, the experimental city's 'sustainability' is linked to self-sufficiency. The more China can produce for itself, the more insulated the economy becomes to outside market fluxes.

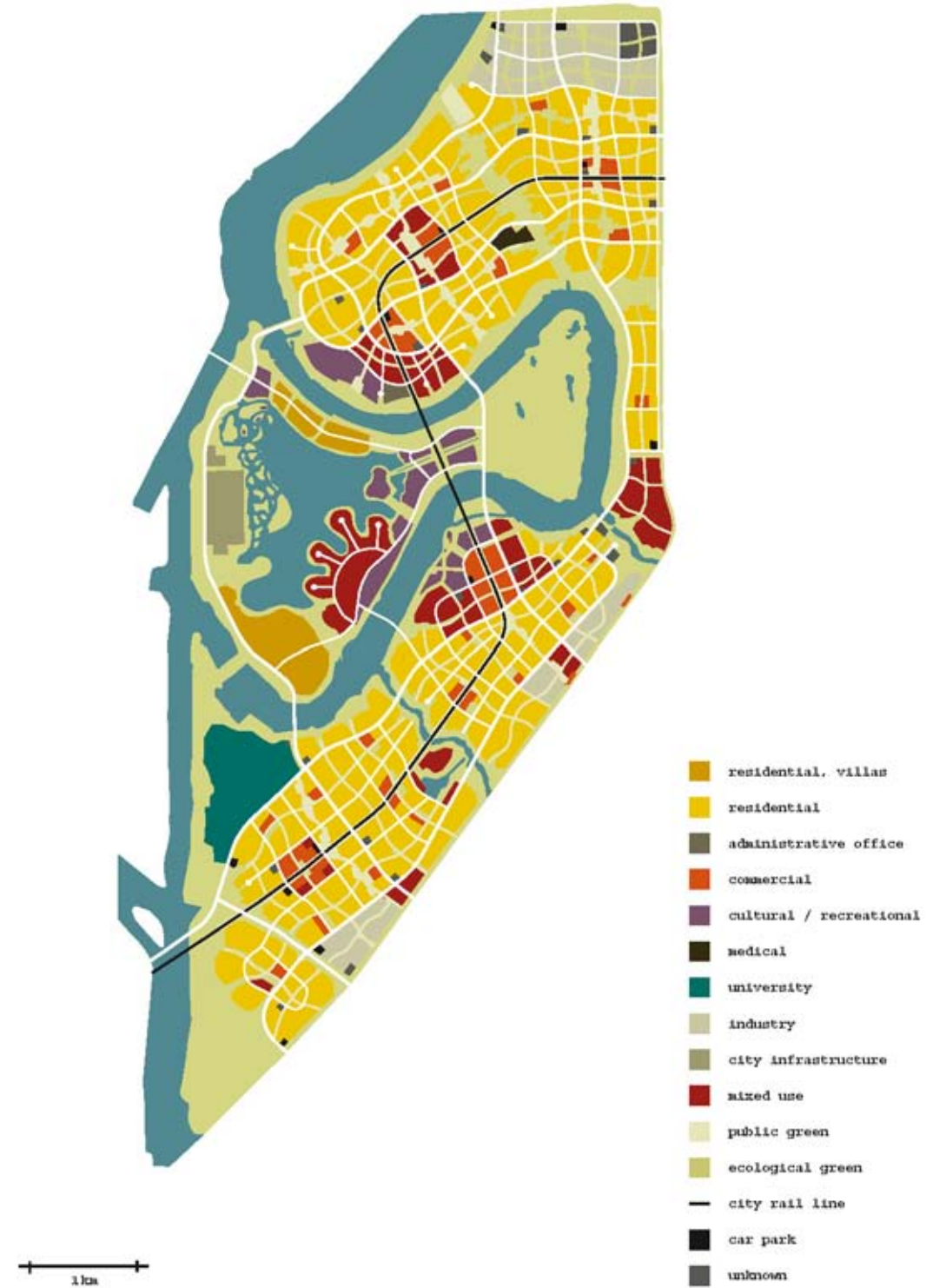
<sup>57</sup> The final four proposed sites were Tianjin, Caofeidian (who would later develop their own eco-city project), Baotou in Inner Mongolia and Urumqi in the western Xinjiang province.

<sup>58</sup> The entire Tianjin Binhai New District (TBND) has been earmarked by the national government as an important growth engine for the northern coastal areas. TBND has a total planned area of 2,270 km<sup>2</sup>, a 153 km long coastline, and a resident population of 1.4 million. See <http://en.investteda.org/> for more information about the development zone.



The salt pans that originally occupied the site formed a geometric pattern, stretching across the site of the planned New Town. These have since been infilled.







**59** Oddly enough, this is not the first time the two governments have collaborated on a large-scale development; in the 1990s, Suzhou Industrial Park (SIP) was built as joint Sino-Singaporean project. Although now considered an economic success, the SIP garnered headlines in 2000 when the project faced more than \$90 million in accumulated debt. Singaporean partners pointed to a competing Industrial Park (subsidized by the Chinese government) as a large contributor to the losses. In the current Tianjin project, Singaporeans are facing similar issues. As might be expected in such a collaboration, they do not always have the same priorities as local Chinese officials. Ng, G., “Rumblings in Tianjin Eco-City”, *The Straits Times*. December 27, 2009.

**60** Sino-Singapore Tianjin Eco-City. Presentation for analysts, given by the Keppel Corporation on August 25, 2008.

**61** Sino-Singapore Tianjin Eco-City (SSTEC) is also the name of the master developer of Tianjin Eco-City. SSTEC represents a “50:50 joint venture between the Chinese Consortium led by Tianjin TEDA Investment Holding Co. Ltd. (Tianjin TEDA) and the Singapore Consortium led by the Keppel Group.” As master developer, SSTEC is responsible for “infrastructure investment and construction, hotel operation and management consultation, real estate development, management and consulting (within Sino-Singapore Tianjin Eco-City), management of rental housing, construction, conservation and advisory services on landscape architecture, municipal engineering investment and construction, research and development of environmental technology and skills development and training.”

See: General Announcement by Sunway City Berhad, October 27, 2010. <http://ir.chartnexus.com/sunwaycity/onenew.php?id=13145&type=Announcement>, retrieved on November 5, 2010.

**62** [http://www.keppcorp.com/kcd\\_eAR/2007/features/ecocity.asp](http://www.keppcorp.com/kcd_eAR/2007/features/ecocity.asp), retrieved on October

highway will connect these industries and port areas with the Tianjin Eco-city and then continue around the Bohai Bay to the Caofedian Eco-city, thus connecting the two experimental New Towns. The Tianjin-Qinhuangdao High Speed Rail and the Beijing-Tianjin-Tangshan Intercity Rail will both provide quick and efficient transport between the Eco-city and downtown Tianjin.

## Dual nationality

Of all the eco-cities currently in development, Sino-Singapore Tianjin Eco-city (SSTEC) is probably the most ambitious in terms of scale. The New Town will revitalize 30 km<sup>2</sup> of former salt pans to accommodate 350,000 residents. These flat, rectangular basins of shallow water have already been filled in to create land for the New Town. But in addition to its impressive size, Tianjin Eco-city represents something rather unheard of: it is a city that belongs to two countries.<sup>59</sup> Both Singapore and China lay claim to this New Town, built on the eastern edge of the existing megapolis Tianjin. The city is intended as a model for the hundreds of New Towns to be constructed over the next 20 years in the PRC, and as such all the concepts and technologies involved should meet the criteria of ‘Practicability, Replicability and Scalability’, collectively known as the ‘Three Abilities’.<sup>60</sup> The other main creed of the project is embodied in the ‘Three Harmonies’: harmony with economic development, harmony with society, and harmony with the environment.

Although Tianjin Eco-city is located thousands of kilometers north of Singapore, the city represents a cooperative effort between the Chinese and Singaporean governments to plan and construct what they term a ‘truly sustainable’ city. As master developer, SSTEC therefore represents a public-private partnership between various international actors.<sup>61</sup> The Singaporean government is officially contributing “proven experience and know-how in large-scale urban design and master-planning, environmental protection, resource conservation, recycling economy, ecological infrastructure development, use of renewable energy, reuse of wastewater, sustainable development and promotion of social harmony.”<sup>62</sup> China’s contributions tend toward the more tangible: land, resources and financial support. The bilateral venture is overseen by the Sino-Singapore Tianjin Eco-city Investment and Development Company, which is made up of a Singapore conglomerate led by the Keppel Group, a publically-listed company controlled by Singapore’s government, and a Chinese consortium led by Tianjin TEDA Investment Holding Company, a conglomerate state-owned enterprise.<sup>63</sup>

As a partner in this effort, Singapore clearly has the clout to build a new city for 350,000 people.<sup>64</sup> Its reputation for housing the masses is one of the best in the world, and the tiny nation has a long history of New Town construction.<sup>65</sup> Though constructed on Chinese land, where the advantages for the PRC are more obvious, SSTEC will also benefit Singapore in multiple ways. Two of the project’s stated goals are to “broaden and deepen the Singapore-China partnership” and to “demonstrate the

determination of Singapore and China towards environmental protection, resource and energy conservation and sustainable development.”<sup>66</sup> Even while playing a more supporting role, Singapore improves its international reputation, exports relevant knowledge and expertise, and solidifies its position as a nation committed to a sustainable future.

## ‘Where happiness dwells’

At The Fourth Joint Working Committee Meeting in 2009 (co-chaired by Singaporean and Chinese representatives), proposals from six international design consultancy firms were assessed in a final review for the Eco-city Urban Design International Competition.<sup>67</sup> The firms that made it to the final round were Germany’s Rheinschiene Architects & Planners (RG), USA’s Kalarch Design Group (KDG), Singapore’s Surbana International Consultants, Australia’s Peddle Thorp & Walker Architects (PTW), USA’s RTKL and Finland’s VTT.<sup>68</sup> The expert panel eventually recommended using the proposals from RG and KDG “as the foundation for the further development of the Eco-city’s urban design proposal, while also incorporating good ideas from the other four proposals.”<sup>69</sup> Using this conglomerate starting point, the city’s masterplan was later jointly developed by the Chinese Academy of Urban Planning and Design, the Tianjin Institute of Urban Planning and Design, and the Singaporean Urban Redevelopment Authority. Together, these bodies form a design team that continues to make decisions at both urban and architectural scales.

In order to incorporate the various urban design proposals, the planning team broke the city down into seven very different districts. These districts, or ‘scapes’ allowed the designers to differentiate urban environments within the 30 km<sup>2</sup> site. There is a Lifescape, an Eco-Valley, a Solarscape, an Urbanscape, a Windscape, an Earthscape and an Eco-Corridor. Each district has a different architectural and urban character, creating seven unique areas within the city, and giving designers freedom to experiment with new urban forms. In renderings, parts of the project appear vaguely biological. The Lifescape, for example, is characterized by a series of green hills, or earth-covered mounds, while the Eco-Valley is one of the most futuristic-looking areas, with transparent domed shells bubbling up among green pathways and bridges. The Solarscape will be the administrative and civic core of the city, with more familiar skyscrapers and glass towers. The Urbanscape is one of the most densely-populated areas, with stepped housing cascading towards the groundplane in a tight, efficient design. The Earthscape offers a landscape of terraced greenery overlooking pedestrian parks and pathways. These experimental typologies reflect Tianjin’s dedication to exploring new solutions for age-old urban questions. Unlike Masdar City, which relies on a more uniform aesthetic on a much smaller plot, Tianjin Eco-city uses its large site to test-drive architectural alternatives.

Within in the New Town, and in contrast to the tight grid of older Chinese cities, SSTEC’s streets are organized by a looser, waving grid structure. Plots of varying sizes have been sold off to developers, resulting in

23, 2009.

**63** The framework agreed on by both national governments places ultimate responsibility for the project in the hands of a Joint Working Committee headed by Singapore’s Minister for National Development and China’s Minister of Construction. The JWC will then report on the project’s progress to the Joint Steering Committee which is co-chaired by none other than Singapore’s Deputy Prime Minister and China’s Vice Premier; just one step from the top. China’s top-down planning process means that Beijing’s approval is critical to the city’s future.

**64** Roughly 80% of Singaporeans live in Housing and Development Board (HDB) New Towns, and this figures largely in the country’s attention to housing policy. By centralizing the responsibility with the HDB, Singapore is able to control aspects of the planning, design, and construction process that other countries are unable to manage. After construction (sometimes during), the New Town is handed over to a grassroots organization: the New Town is then owned and operated directly by the New Town. This policy recognizes the seemingly obvious fact that the people who live in the city often know best what is needed and what changes must be made to maintain a healthy and efficient metropolis. 95% of those living in HDB flats actually own their property. In 2009, only 5% were renting. Ownership, of course, also increases perceived responsibility, and this may be another reason for Singaporean New Towns’ continued success. See: HDB Annual Report 2007/2008 “Fulfilling Aspirations”, p. 60-67.

**65** Singapore boasts numerous widely lauded New Towns; in total, the national government has built 22 New Towns since planning began for the first prototype, Queenstown, in 1952. Although the New Towns look suspiciously similar to Hong Kong’s housing towers, the difference is in the amenities offered by Singaporean New Towns. Construction on Tampines New Town, for instance,



The view from a residential tower: greenery is everywhere in this eco-city, even climbing the facades.







The existing village of Qingtuozi looks like many other small coastal villages. These buildings will be renovated into upscale restaurants and shops.



was completed in 1991, and the resulting city offered three shopping malls, an IKEA, a stadium, a public library, primary, secondary and tertiary schools, a family center, and (perhaps most importantly) an efficient public transportation network that connects Tampines New Town to neighboring cities. These facilities mean that residents do not have to leave the city in order to find entertainment or work. The city is connected, while also being autonomous. In 1992, Tampines New Town won the United Nations World Habitat Award in recognition of an 'outstanding contribution towards human settlement and development.' For other winners and for more information about the World Habitat Awards, see: <http://www.worldhabitatawards.org/>

**66** Quotes are taken from the presentation slides of Ms. Grace Fu, Senior Minister of State for National Development and Education, given at the East Asian Summit Conference on Livable Cities. The Eco-city was exhibited at the World Cities Summit which took place June 24-26, 2008.

**67** Co-chaired by the Singaporean Minister for National Development, and Chinese Vice-Minister of the Ministry of Housing and Urban-Rural Development, the meeting was also attended by Tianjin Mayor Huang Xingguo and Vice-Chairman of the JWC and Ms. Grace Fu, Senior Minister of State for National Development and Education. According to the press release from the Ministry of National Development, "The competition was jointly organized by the Eco-city Administrative Committee (ECAC) and Singapore's Urban Redevelopment Authority (URA) in February 2009 to generate ideas for the overall urban design of the Eco-city as well as for focal areas within the Eco-city, such as the eco-valley and the Qing Tuo Zi Village." See: [http://www.tianjineco-city.gov.sg/Press%20Releases/2009/06\\_03\\_2009.htm](http://www.tianjineco-city.gov.sg/Press%20Releases/2009/06_03_2009.htm), retrieved on October 26, 2010.

**68** The expert evaluation panel was

semi-uniform urban blocks. Currently, there are ten developers working on projects within the city, and half of them are international; these far-flung influences are recognizable in the diversity of urban solutions.<sup>70</sup> Hong Kong-based Shimao Property Holdings is developing the largest area, at the southernmost tip of the eco-city.<sup>71</sup> The public transport system, with high-density urban nodes connected along a single path, is also a classic Hong Kong solution. The Taiwanese property developer Farglory is developing a large chunk of the city (100 ha) including the renovation of the existing Qing Tuo Zi Village. Smaller plots are scattered around the southern half of the city, including Keppel Corporation's Seasons Park residential development.<sup>72</sup>



Seasons Park is one of the first residential developments under construction in Tianjin Eco-city. The project is being developed by Keppel Land Corp.

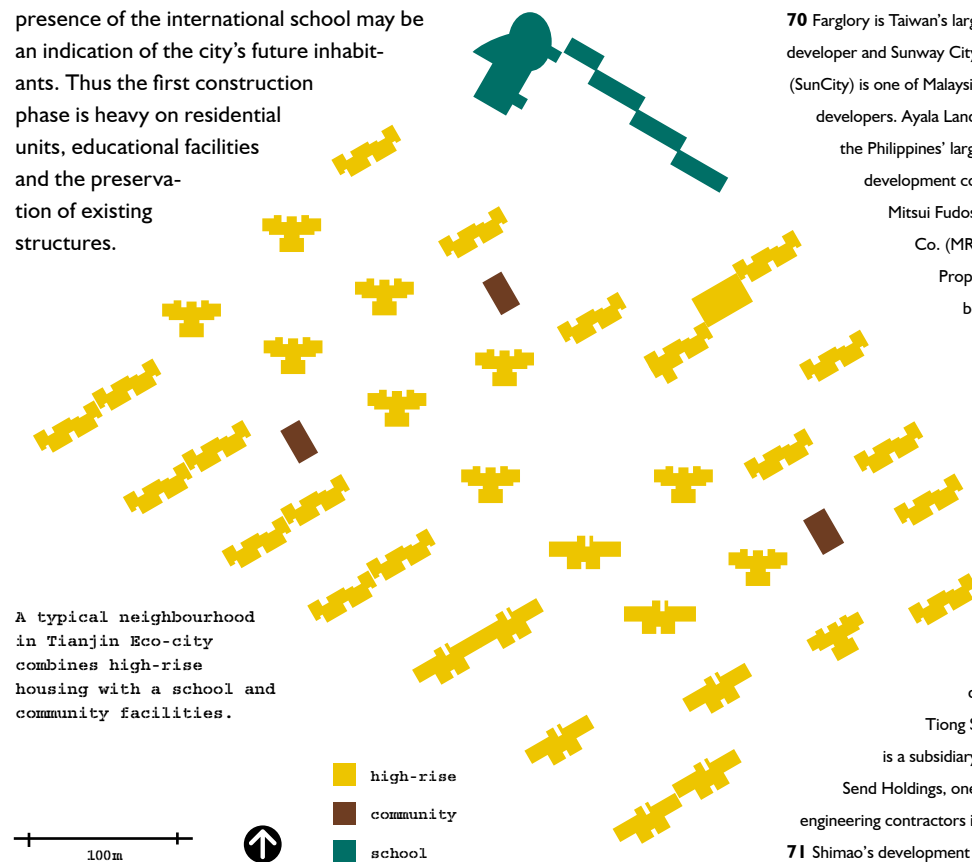
The Start-Up Area is organized by a street grid and bisected by the 'green corridor', or 'eco-valley'. This central axis acts as the development's circulation spine, providing various means of public transport through the city (rail, bus, tram, etc.) as well as pedestrian access to the main commercial and administrative areas. The 'eco-valley' stretches 12 km through the city in a north-south direction, connecting different transit nodes and public facilities. This large open green space will also incorporate "water-sensitive urban design elements, such as eco-swailes and dry streams."<sup>73</sup> The 50 m wide 'green spine' will serve as one of the SSTECS' main public spaces. There are also plans for a light rail system that would run underneath the green spine.

Because this corridor is also the city's main artery, building heights are highest along its edges. Moving outward from the eco-valley, building heights fall from a maximum of 150 m at the edges of the green corridor to a height of 60 m one block away on either side, then down to 40 m at the periphery of the development. The advancing height restrictions give the central axis a much greater density than the outlying areas, creating a strongly stepped skyline. Almost every building within the city (other than the preserved villages) will be more than ten stories tall.

The two fishing villages in question, Qing Tuo Zi Village and Wuzi Village, are small agricultural communities, somewhat fallen into disrepair. Along with the thousand-year-old Ji Canal, these buildings will be preserved and modified. Reportedly, the 2,000 villagers who were relocated to make way for the development have been guaranteed both housing and work in the new eco-city.<sup>74</sup> Qing Tuo Zi fishing village will "represent the heritage of traditional culture" while simultaneously being retrofitted to house new retail, restaurants and wellness centers.<sup>75</sup> In both villages, the traditional single story housing will be fully renovated. The use of historical architecture as an attraction is a common strategy in many contemporary New Towns.<sup>76</sup> In this case, the ancient Ji Canal will also be fully reconstructed.<sup>77</sup> The present course of the waterway has been preserved and used as an organizational tool in the masterplan: two urban cores are connected by a bridge and public transport link where the waterway curves around on itself.

The next phases will be developed over the coming years until the city's planned completion in 2023. Phasing will move north from the Start-Up Area, beginning with The Southern District, which will be completed during Phase I. This district is almost wholly dedicated to housing, apart from a rather quirky new home for the local film production industry. The GEMS World Academy, an international school, is scheduled to open in September 2011. The presence of the international school may be an indication of the city's future inhabitants. Thus the first construction phase is heavy on residential units, educational facilities and the preservation of existing structures.

A typical neighbourhood in Tianjin Eco-city combines high-rise housing with a school and community facilities.



■ high-rise  
■ community  
■ school



A three-bedroom flat in the Seasons Park development.

co-chaired by Mr. Zou Deci, Fellow of the China Academy of Engineering and Advisor to the China Academy of Urban Planning and Design, and Mrs. Cheong Koon Hean, CEO of URA. [http://www.tianjineco-city.gov.sg/Press%20Releases/2009/06\\_03\\_2009.htm](http://www.tianjineco-city.gov.sg/Press%20Releases/2009/06_03_2009.htm), retrieved on October 26, 2010.

**69** Ibid.

**70** Farglory is Taiwan's largest property developer and Sunway City Berhad (SunCity) is one of Malaysia's top developers. Ayala Land Inc. is one of the Philippines' largest real estate development companies, while Mitsui Fudosan Residential Co. (MRF) & Tiong Seng Properties Pte. are both Japanese. MRF is one of Japan's largest

property developers and Tiong Seng Properties is a subsidiary of Tiong Send Holdings, one of the top engineering contractors in Singapore.

**71** Shimao's development will cover 100





用地平衡表			
项目	单位	数值	百分比
规划总用地	m <sup>2</sup>	127205.7	
一居住区用地	m <sup>2</sup>	100286.7	100.00%
1住宅用地	m <sup>2</sup>	62374.7	62.20%
2公共服务设施用地	m <sup>2</sup>	10700	10.67%
[1]教育	m <sup>2</sup>	0	
[2]医疗卫生	m <sup>2</sup>	96	
[3]文化体育	m <sup>2</sup>	140	
[4]社区服务	m <sup>2</sup>	864	
[5]行政管理	m <sup>2</sup>	700	
[6]商业金融	m <sup>2</sup>	900	
[7]市政公用	m <sup>2</sup>	1100	
[8]展示中心	m <sup>2</sup>	6900	
3道路用地	m <sup>2</sup>	8912	8.89%
4绿地用地	m <sup>2</sup>	18300	
[1]公共绿地	m <sup>2</sup>	7800	7.78%
[2]附属绿地	m <sup>2</sup>	10500	10.47%
二其他用地	m <sup>2</sup>	26919	
1城市道路用地	m <sup>2</sup>	15836	
2公共绿地	m <sup>2</sup>	11083	

技术经济指标表		
项目	单位	数值
总建筑面积	m <sup>2</sup>	187938
其中		
1地上建筑面积	m <sup>2</sup>	139276
[1]规划住宅建筑面积	m <sup>2</sup>	133684
[2]规划公建建筑面积	m <sup>2</sup>	5592
2地下建筑面积	m <sup>2</sup>	48662
住宅建筑净密度	m <sup>2</sup> /m <sup>2</sup>	2.1
住宅建筑净密度	%	10.87%
建筑高度	m	74.5
人口毛密度	人/hm <sup>2</sup>	326
其中		
居住户数	户	1167
60-90m <sup>2</sup>	户	477
90-150m <sup>2</sup>	户	690
居住人数	人	3268
户均人口	人/户	2.8
建筑密度	%	10.40%
容积率		1.4
人均绿地	m <sup>2</sup>	2.39
绿地率	%	44.17%
机动车停车位	辆	1024
其中		
1地上停车位	辆	0
2地下停车位	辆	1024
非机动车停车位	辆	1894

彩色总平面图

The Shimao neighborhood shows the organization of high-rise towers on a city block. The majority of housing is oriented on the north-south axis, a characteristic of the Chinese 'feng shui'.



ha of both residential and commercial space, with a total investment of more than RMB 10 billion (\$1.5 billion). The area will be called 'Wetland Century'. Shimao Property Holdings is currently one of the largest property developers in Shanghai. Founded in 2001 by Chinese billionaire Xu Rongmao, the company website lists the area as 'The Tianjin Shimao Ecology City'. See: <http://www.shimaoproperty.com/en/projectpage.aspx?MetaDataId=1210>, retrieved on November 26, 2010.

**72** A soft launch of 220 units in November 2010 showed strong buyer interest and resulted in the sale of 90% of the units. Seasons Park will eventually have 1,672 'eco-homes'. The development will offer 1, 2 and 3 bedroom flats, of 79 m<sup>2</sup>, 87 m<sup>2</sup> and 135 m<sup>2</sup> respectively. The average per square meter price of the sold units was RMB 11,000 (\$1,650). See: "Keppel's eco homes in Tianjin Eco-City draw strong buyer interest." Keppel Land Press Release, November 1, 2010.

**73** "Sino-Singapore Tianjin Eco-City Draft Masterplan." Singapore Ministry of National Development Press Release, April 17, 2008.

**74** "\$9.7b Pricetag for Landmark Tianjin Eco-city", The Straits Times, May 7, 2008.

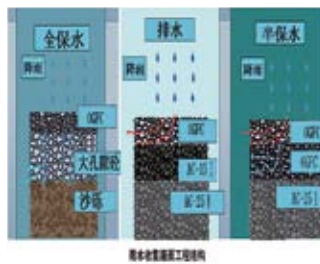
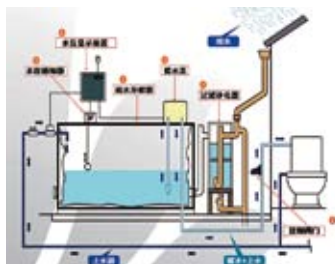
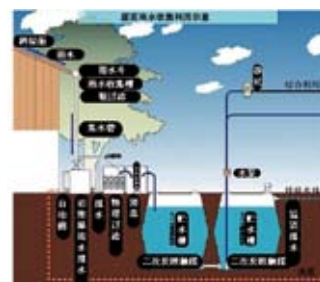
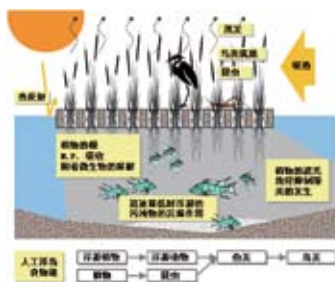
**75** [http://www.tianjineco-city.com/en/eco\\_city/Eco\\_City\\_Master\\_Plan/966.aspx](http://www.tianjineco-city.com/en/eco_city/Eco_City_Master_Plan/966.aspx), retrieved on October 18, 2010.

**76** The phenomenon is perhaps best exemplified by the themed New Towns encircling Shanghai, each of which boasts a small city center that mimics a specific vernacular. The case study on Songjiang New City goes into more depth on this topic.

**77** The Ji Canal was a historically important trade route for water-based traffic. During the 19th century, thousands of junks and smaller boats used the canal to transport salt from the flats for inland trade. See: Bun, K. M., *The Salt Merchants of Tianjin: State Making and Civil Society in Late Imperial China*. University of Hawai'i Press, 2001.

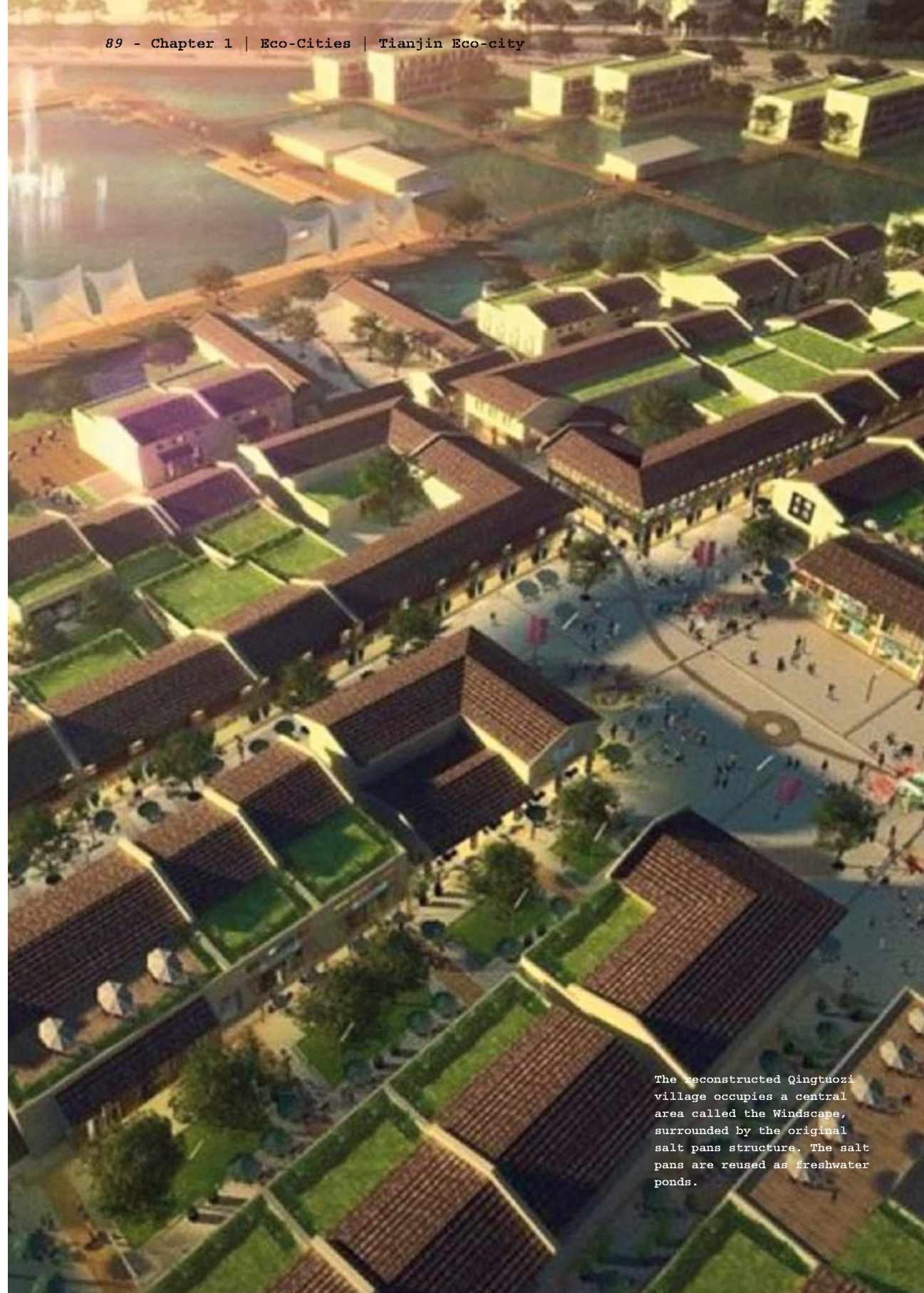
**78** According to a press release from SSTECC, the developers signed a

Development of the Central District will follow in Phase 2. The aptly-named Central District will serve as the city's downtown area, combining commercial and business zones with more residential areas. At the geographic heart of the city, an island 'eco-core' will be characterized by entertainment facilities and private villas. SSTECC has also partnered with big names from the tech world, such as Hitachi, Philips and Siemens, in order to design a green Central Business District, or 'Eco-CBD'.<sup>78</sup> In renderings this area is also visualized as a sort of urban base sprouting plant material from every orifice. Roofs are swathed in green, fully matured trees line every sidewalk and avenue, and a flock of white birds passes in the foreground. In subsequent phases, the Northern District will become the city's administrative and cultural center, with some residential neighborhoods as well. After the final phase, the Northeast District will be home to various high-tech eco-industries and more residential neighborhoods. In this district, the existing Wu Ki Village will also be reinterpreted as a commercial area.



Diagrams show various technical schemes used in Tianjin Eco-city to reduce energy use and encourage natural processes.

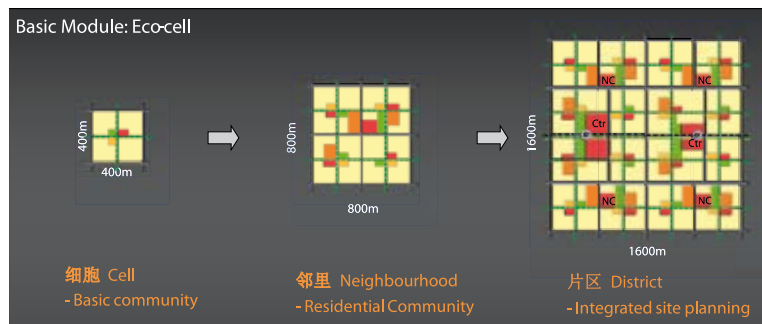
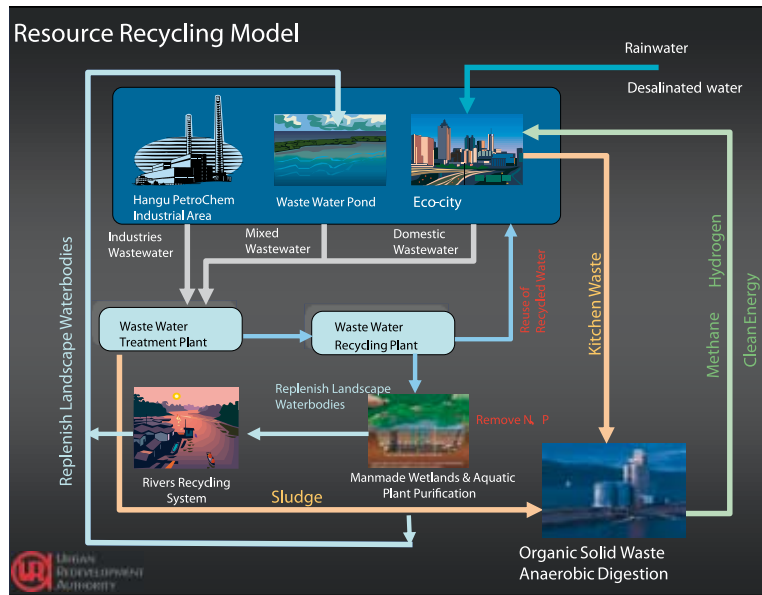
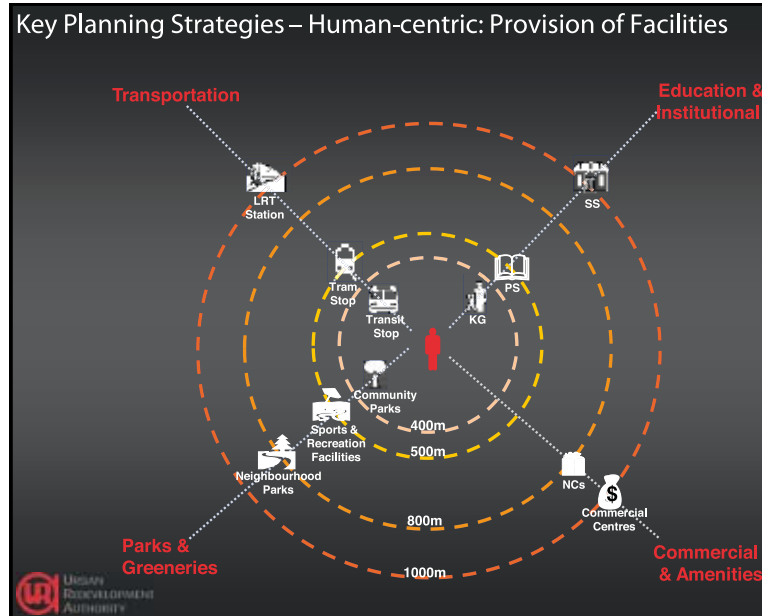
Throughout the city, the basic building block of the eco-city masterplan is an 'Eco-Cell', a module of 400 x 400 m arranged in a grid. Educational, commercial, office and recreational areas are distributed within these Eco-Cells and "located close to the residential areas to minimize commuting. Together, these Eco-Cells add up to form neighborhoods, districts, and eventually the urban centers."<sup>79</sup> Inside one of Tianjin's first Eco-Cells, the development team has worked with SunCity to design a prototype Lifestyles of Health and Sustainability (LOHAS) community. The plan will include 5,000 households, or roughly one-fifth of the 4 km<sup>2</sup> Start-Up Area. The LOHAS development is the first area where Tianjin Eco-city really starts to look the part. The area is characterized by hovering green



The reconstructed Qingtuozui village occupies a central area called the Windscape, surrounded by the original salt pans structure. The salt pans are reused as freshwater ponds.



Energy and planning concept diagrams show how Tianjin Eco-city will recycle resources and encourage sustainable practices.



pedestrian pathways, moving between mid-rise housing towers in sweeping curves. The towers are semi-transparent, with lots of glass and solar panels on every roof. Green growth drips from every balcony and climbs straight up the facades of two round towers. The double layering of the sinuous paths gives the public space a loose three-dimensional aspect that is in direct contrast to the strict 400 x 400 m grid of blocks that informs the rest of the urban plan.

According to a press release from SSTECH, the development will include “premium waterfront villas, garden terraces, mid- to high-rise apartments, retail and street malls, schools and neighborhood centers... unique features such as hydroponic gardens, greenhouses for organic farming, green spa, yoga and Pilates deck, tai chi platform and youth park to embrace this healthy and sustainable lifestyle.”<sup>80</sup> In reference to the curvilinear pathways weightlessly suspended in renderings: “communal decks will be introduced to connect human activities and green spaces [thereby] connecting the apartments and offices, allowing future residents to walk or cycle within the entire development. This modern concept of eco-decks brings to life the joy of connecting community as good neighborliness has been a key traditional value for the social harmony of Chinese society.”<sup>81</sup>



The bubbling hills in the Lifescape shield interior gardens and spaces from air pollution and weather.

### Housing for all

The subsidized housing in Tianjin Eco-city is an exception to the rule for most contemporary Chinese New Towns. While some New Towns construct subsidized or low-rent housing in fringe areas—or, more often, leave it out completely—these developments are never presented in the marketing material, and they are likewise rarely discussed in any public forum.<sup>82</sup> Tianjin Eco-city, on the other hand, makes it a point to publicize both low-income housing and specialized housing for elderly and handicapped residents. This dedication to public housing comes from the Singapore partners. In fact, Grace Ng from the Singapore-based *Straits Times* (a state-owned newspaper) reports that Chinese officials have repeatedly shown a ‘lukewarm’ response to the idea.<sup>83</sup>

The focus on social sustainability is a hallmark of Singaporean New Town design. Since Queenstown was initiated in 1952, Singapore’s Housing and Development Board (HDB) has developed 22 New Towns.<sup>84</sup> HDB policy includes a commitment to economic diversity within its public housing developments: different income levels are deliberately mixed to prevent social stratification. The housing estates are also controlled by quotas for ethnic groups, in an effort to prevent any one area from becoming

Memorandum of Understanding on 29 September 2010 with Hitachi (China) Ltd. (Hitachi), Philips (China) Investment Co. Ltd. (Philips), Siemens Ltd. China, Corporate Technology (Siemens), and Singapore Technologies Engineering Ltd. (ST Engineering), and two major Asian real estate developers - Ayala Land Inc. (Ayala Land) and Farglory Land Development Group (China) (Farglory). See: [http://www.tianjineco-city.com/en/news\\_center/](http://www.tianjineco-city.com/en/news_center/)

[press\\_release/1181.aspx](http://www.tianjineco-city.com/en/news_center/press_release/1181.aspx) for more details; retrieved on October 26, 2010.

<sup>79</sup> This urban hierarchy is a descendant from 20th-century New Towns. In its earlier incarnation, the New Town was also organized using neighborhoods as building blocks to create sub-communities within the urban environment. See: [http://www.tianjineco-city.com/en/news\\_center/press\\_release/1118.aspx](http://www.tianjineco-city.com/en/news_center/press_release/1118.aspx), retrieved on October 19, 2010.

<sup>80</sup> [http://www.tianjineco-city.com/en/news\\_center/press\\_release/1118.aspx](http://www.tianjineco-city.com/en/news_center/press_release/1118.aspx), retrieved on October 19, 2010.

<sup>81</sup> Ibid.

<sup>82</sup> It has been our experience that Chinese New Town developers are also reluctant to discuss low-income housing, even when directly questioned about it. Developers and politicians would much



Housing and skybridges in the Earthscape use a terraced organization to connect program and separate functions. The compact flats and roof gardens make efficient use of space. Note the eight-lane highway in the foreground.

prefer to discuss the array of housing choices for the upwardly mobile. In April 2011, however, Premier Wen Jiabao announced that the national government would raise its funding allocation for affordable housing to 18 billion yuan (\$2.8 billion). Though the discussion is promising, these measures will likely do little to alleviate China's housing problems.

**83** Ng, G. "Rumblings in Tianjin Eco-City", *The Straits Times*, December 27, 2009.

**84** The HBD is the public housing arm of the Ministry of National Development. They are responsible for all public housing in Singapore.

**85** The HBD's achievements were recently recognized by UN-HABITAT when it was awarded the 2010 Scroll of Honour Award "for providing one of Asia's and the world's greenest, cleanest and most socially conscious housing programmes." This recognition

racially uniform. As the country's population has started to age, the HDB has begun to retrofit existing units to suit the needs of elderly inhabitants. In contrast to China, public housing in Singapore carries no stigma or social disgrace. Because of the tiny country's severe land shortage, private land is almost impossible to afford, and thus the majority of the country resides in public housing flats. The HBD currently houses more than 80% of the Singaporean population, and 95% of those inhabitants have purchased a 99-year lease on their property. As any landlord knows, these residents are much more likely to maintain and invest in upgrades for their properties than temporary renters. HBD's commitment to social cohesion and home ownership in its New Towns has garnered multiple awards from the international community.<sup>85</sup> That same commitment is evident in Tianjin Eco-city. On the city's Singaporean website (there is also a Chinese website), 'Social Harmony' is listed as 'No. 8' on the New Town's list of features. According to the website: "The Eco-city will place emphasis on the development and strengthening of social harmony among the residents. There will be subsidized public housing, so that people of different income and social strata can live near to and interact with one another. Communal amenities and facilities will be widely accessible. The Eco-city will also be barrier-free to cater to the needs of the elderly and the mobility-impaired."<sup>86</sup> The Chinese version makes no mention of subsidized housing.

## Defining an eco-city

In an effort to quantify and define what it means to be an eco-city, the SSTEJ Joint Committee has identified 26 Key Performance Indicators that fall under three categories: Ecological & Environmental, Social and Economic. These Indicators guide the planning and development of the Eco-city.<sup>87</sup> They stipulate that residents should not consume more than 120 liters of water per day, should not produce more than 0.8 kg of domestic waste per day, and that they should cycle or walk rather than use their cars within the Eco-city. These numbers sound convincing until one gets the itch to look up comparable statistics. According to the American Water Works Association, the average American uses 262 liters per day, which certainly makes 120 liters per day sound like a major sacrifice.<sup>88</sup> The average Chinese citizen, however, uses just 86 liters per day.<sup>89</sup> In 2006, Taiwan reported a daily per capita waste volume of 0.6 kg, whereas in mainland China the average waste production for urban residents is 1.2 kg per person per day.<sup>90</sup> Clearly Taiwanese citizens are the more conscious consumers, but compared to these statistics, a production goal of 0.8 kg waste per day seems somewhat relaxed; hardly a strident rule for the ambitious residents of a model eco-city.

Quantitative goals abound in the city's marketing literature: by 2013, 20% of the housing will be subsidized public housing, and by that time the city intends to provide employment opportunities for at least 50% of employable residents.<sup>91</sup> Being employed in the same city in which one lives is a reasonable way to reduce transportation needs, and the pollution related to that transportation. However, the goal of providing employment for just 50% of the employable residents is remarkably low. As we will see in the following chapters, including employment opportunities in the plans for a New Town is critical to its future success. Without enough job possibilities, New Towns quickly deteriorate into bedroom communities, or worse.

Tianjin Eco-city also plans to provide 12 m<sup>2</sup> public green space per person, and at least 70% of the plant species in this green space will be native to the region. Native plant species require fewer pesticides, do not require fertilizers, need less frequent watering than non-native plants, and they promote natural biodiversity. At first, 12 m<sup>2</sup> sounds like enough room for a decent picnic, but when one realizes that the EU norm is 26 m<sup>2</sup> per capita, and that the World Health Organization recommends at least 50 m<sup>2</sup> per capita, the 12 m<sup>2</sup> of public green space in Tianjin Eco-city seems positively claustrophobic.

The eco-city will benefit from both wind and solar farms, reducing the inhabitants' dependence on energy from non-renewable resources, though not replacing them fully. On one hand, of course it is tempting to applaud any attempt to curb waste production and encourage

follows the World Habitat award presented to Tampines New Town in 1992 by the United Nations. <http://www.hdb.gov.sg/fi10/fi10320p.nsf/w/HDBWinsUNAward?OpenDocument>, retrieved on October 25, 2010.

**86** <http://www.tianjineco-city.gov.sg/>, retrieved on October 24, 2010.

**87** For example: Ambient Air Quality: The air quality should meet China's National Ambient Air Quality Grade II Standard for at least 310 days. The SO<sub>2</sub> and NO<sub>x</sub> content in the ambient air should not exceed limits stipulated for China's National Ambient Air Quality Grade I standard for at least 155 days. Water Quality: Water bodies within the Eco-city should meet Grade IV of China's latest national standards by 2020. Quality of Water from Taps: Water from all taps should be potable. Noise Pollution Levels: Noise levels must fully comply with China's standards for environmental noise in urban areas. Carbon Emissions: The carbon emission per unit GDP in the Eco-City should not exceed 150 tonne-C per \$1 million. Wetlands: There should be no net



Ministerial Committee members look at a model of a proposed neighborhood in early 2011.

loss of natural wetlands in the Eco-city.

**88** <http://www.drinktap.org/consumerdnn/Home/WaterInformation/Conservation/WaterUseStatistics/tabid/85/Default.aspx>, retrieved on June 6, 2011.

**89** <http://hdr.undp.org/en/reports/global/hdr2006/>, retrieved on June 6, 2011.



**90** "Country Faces 'Great Wall' of Waste", China Daily, January 9, 2007.

**91** [www.tianjineco-city.gov.sg](http://www.tianjineco-city.gov.sg), retrieved on August 15, 2010

**92** For a balanced, detailed documentary on the development and consequent failures of Huangbaiyu, see the PBS film China: Green Dreams; A Not So Model Village by Timothy Leslie at: [http://www.pbs.org/frontlineworld/fellows/green\\_dreams/](http://www.pbs.org/frontlineworld/fellows/green_dreams/)

**93** As of October 2010, Dongtan consisted "of ten wind turbines - no buildings, water taxis, water cleansing plant or energy centres. Construction was to have started in 2006 but nothing has happened yet. The project's project coordinator in the Communist Party has been jailed, charged with corruption, and consultants Arup have since been criticised for participating in numerous dodgy sustainable construction projects. The Dongtan project seems to have lost its momentum, and because of the delay it has been given a mixed reception." See: <http://sustainablecities.dk/en/city-projects/cases/dongtan-the-world-s-first-large-scale-eco-city>,



A market in Wuki Village. This existing town will also be renovated as shops and cafes.

retrieved on November 1, 2010.

**94** Fox, J., "China's Zero-Carbon City Dongtan Delayed, But Not Necessarily Dead, Says Planner", [www.treehugger.com](http://www.treehugger.com), January 24, 2010. <http://www.treehugger.com>

ecologically-conscious activities, but on the other hand, one is tempted to ask why such low standards are applied in a city where one has the opportunity to "adopt innovative policies that will... improve the environment of the surrounding areas." With the advertised goal of creating a model for future eco-cities in mainland China, Tianjin Eco-city falls short of expectation.

## Don't reach too high

The concept of an eco-city has seen a couple of false starts in China, and this may be one of the reasons for the developers' cautionary approach. In what was supposed to be another exemplary eco-community, William McDonough, one of the founders of the Cradle to Cradle movement, designed a village in northern China for a group of farmers. The designs were drawn up from afar and implemented by third parties. After construction, Huangbaiyu was considered unlivable by the intended occupants.<sup>92</sup> Farmers used the small front gardens to plant corn, and sheltered their livestock in the empty houses. McDonough has since removed the project from his website.

The much celebrated (and later much derided) Dongtan Eco-city outside Shanghai is another example of grand ambitions falling riotously flat. Set at the tip of Chongming Island, lead developers Arup announced that Dongtan would house half a million people and would produce zero carbon emissions. When first published in 2005, Dongtan was hailed as a model for future eco-cities across the world. As the project moved

forward, however, political and financial complexities stopped Dongtan in its tracks.<sup>93</sup> According to Arup director Peter Head, "implementation of the masterplan we produced has been postponed. As far as we are aware, this delay is indefinite and we don't know the reasons behind this."<sup>94</sup>

In 2009, Goh Chye Boon (chief of the joint venture running the business park at Tianjin Eco-city), said that his project had learned from Dongtan that it was better to limit expectations than disappoint the public. "We aspire to one day be a dream city like Dongtan but we want to take one credible step

at a time... Dongtan inspired me, but I think when you reach too high, you may forget that the ultimate beneficiary must be the resident."<sup>95</sup> Tianjin's promises are clearly more attainable than Dongtan's. In fact, the city's appeal for many people is financial, rather than environmental. When Wei Qian, a 32-year-old sales manager, saw sales information six months ago

in Tianjin for its Eco-city development, she was intrigued by the novelty of the project. Wei Qian returned with her husband a few days later to inquire about prices. After being told that the homes were not ready for sale, Wei Qian eagerly added her name to the long waiting list of potential buyers. There are clearly sound reasons for purchasing a flat in Tianjin Eco-city, and they have nothing to do with saving the planet. According to Qian, "A 70 m<sup>2</sup> apartment in Beijing is two million yuan (\$293,000) at least, and I heard rumors that the price [for a 70 m<sup>2</sup> apartment] will be 45% cheaper in the Eco-city. That is a good deal and investment. Besides, my parents are Tianjinese, so they are in favor of buying an apartment there. And of course, I noticed that the city will go 'green,' I think it's a fashion trend and could save a lot of money."<sup>96</sup>

Others seem to agree. Real estate sales in the New Town have been surprisingly successful. Ho Cheok Kong, President of Keppel Land China, had this to say about the launch of Tianjin neighborhood Seasons Park: "We have been receiving very strong interest since the groundbreaking for Seasons Park. The positive response during our soft launch reflects the confidence of Chinese homebuyers in the Keppel quality hallmark and international experience."<sup>97</sup> The average price of a unit was RMB 11,000 per m<sup>2</sup> (\$1650) and buyers were mostly from the surrounding areas and Tianjin. Seasons Park's most popular features were "the well-appointed clubhouse with facilities such as an indoor temperate swimming pool, sauna, gymnasium, snooker room and a café-cum-reading lounge."<sup>98</sup> It was unclear how these facilities would exhibit the city's commitment to sustainability.

While some critics disparage Tianjin for its accessible targets, the question for all eco-cities remains: How to balance eco-ambitions with realistic proposals? And where is the line between a true eco-city and a city with some environmentally friendly aspects? Until the term 'eco-city' is fully defined, we will return again and again to false claims and misleading marketing materials. To judge the New Town by its own stated goals, it seems clear that a city that only provides employment for 50% of the inhabitants will inevitably be dependent and struggle for autonomy. If Tianjin Eco-city is truly meant to be 'scale-able, replicable and practical', it would do better to focus on creating a sustainable economic and social environment where 'green' behavior is a natural result, rather than a demand.

[com/files/2010/01/arup-peter-head-dongtan-interview.php](http://com/files/2010/01/arup-peter-head-dongtan-interview.php), retrieved on October 26, 2010.

**95** Watts, J., "China teams up with Singapore to build huge eco city", [guardian.co.uk](http://guardian.co.uk), Thursday 4 June 2009, retrieved on October 26, 2010.

**96** Lu, G., "Home Buyers Cuing Up for Tianjin Eco-City", [Global Times](http://globaltimes.cn), March 24, 2010. <http://business.globaltimes.cn/comment/2010-03/515382.html>, retrieved on October 26, 2010.

**97** "Keppel's eco homes in Tianjin Eco-City draw strong buyer interest", Keppel Corporation Press Release, November 1, 2010.

**98** Ibid.

# Zira Island Azerbaijan

**Date:**  
2008 (design)

**Status:**  
On hold

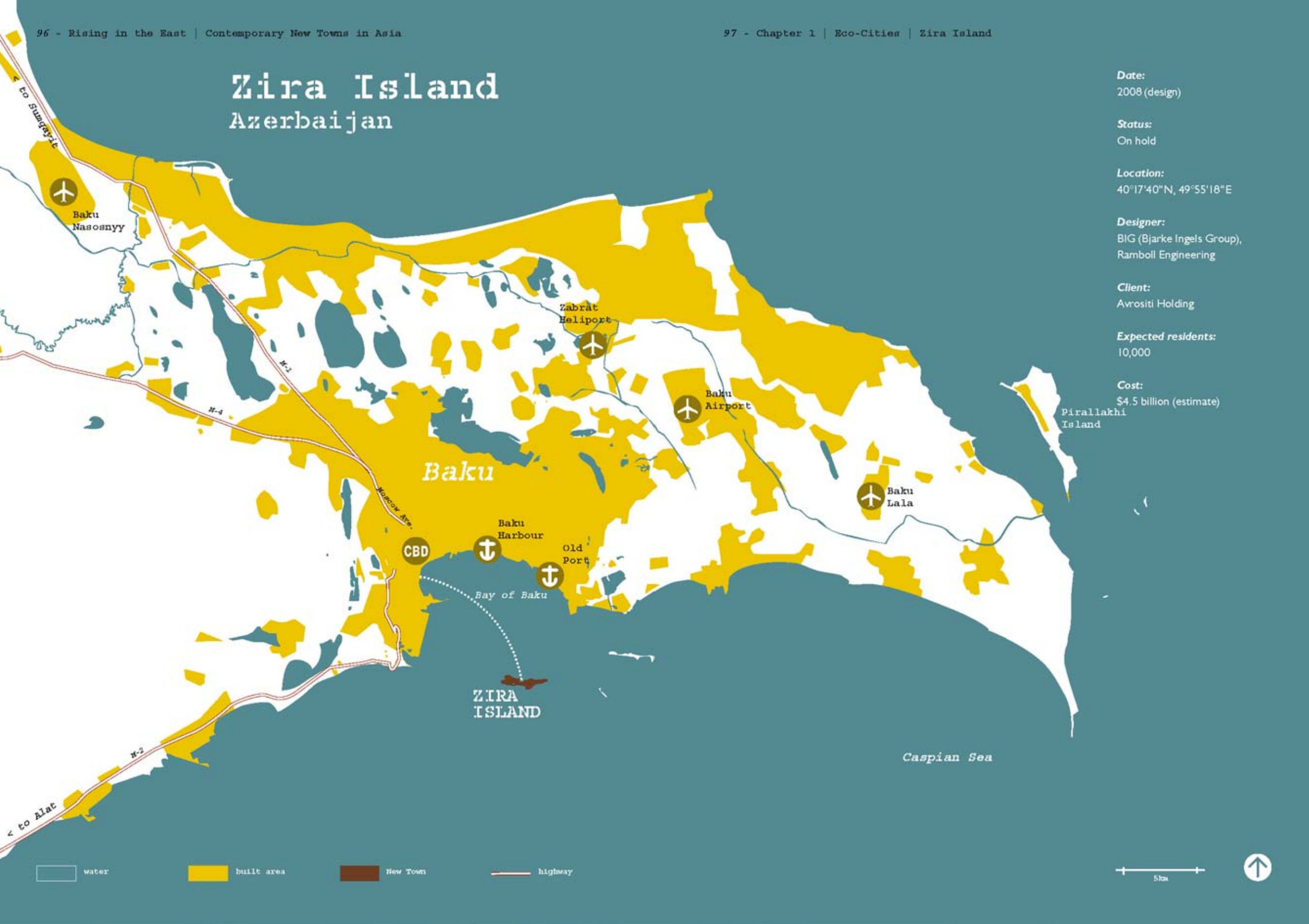
**Location:**  
40°17'40"N, 49°55'18"E

**Designer:**  
BIG (Bjarke Ingels Group),  
Ramboll Engineering

**Client:**  
Avrositi Holding

**Expected residents:**  
10,000

**Cost:**  
\$4.5 billion (estimate)



water
  built area
  New Town
  highway

5km







## Island island

Zira Island takes its name from the Arabic word *jazira* meaning 'island', making the English translation somewhat redundant. In some ways, though, the double name is appropriate. 'Island Island' implies a duality, and the two very different incarnations of this rocky outcrop in the Caspian Sea illustrate this double life. Today, Zira is home to passing flocks of seagulls, a few thickly-muscled rattlesnakes, some wild dogs, and the rusting carcasses of about a hundred half-sunken Soviet ships. Copenhagen-based architecture firm BIG (Bjarke Ingels Group) has proposed a masterplan to re-envision the 3 km<sup>2</sup> island as a "zero-energy resort and entertainment city."<sup>99</sup> The island is imagined as a carbon-neutral community and "model for future sustainable urban development... entirely independent of external resources."<sup>100</sup> BIG's seductively rendered Zira Island is conceived as an alternative paradigm of sun and wind-fueled living in a young post-Soviet democracy that is highly dependent on fossil fuels.

But Zira Island was not always the abandoned crest it is today. During the years of Soviet control, the island was known as Nargin Island, and later as Böyük Zira. Although the island was never fully inhabited, a lighthouse was built in 1814, and the island served as a POW camp during both World Wars. During the First World War, long lines of Ottoman POWs were marched through the city of Baku and conveyed to the island.<sup>101</sup> Harsh conditions awaited them. During the Bolshevik occupation, Nargin Island and neighboring Kum Zire became known as 'the islands of death' because "so many Azerbaidzhani intellectuals were executed there."<sup>102</sup> Later, during the 1920s and 1930s, Nargin Island was home to a small Soviet naval base. Local historians claim that the island was the site of thousands of executions during the Stalinist era, and there are rumors of mass graves on the isle.<sup>103</sup>

Nargin Island's dark history contrasts sharply with BIG's idyllic plans for Zira Island. From an 'island of death' to a 'resort and residential development', the Zira Island project is one of the most ambitious rebranding efforts in this collection of New Towns. The project requires not only the construction of a carbon-neutral community amidst a sea filled with oil platforms (a hefty enough task), but also a proposal strong enough to capture the imaginations of locals and recast Zira in a positive light. So far, the rest of the world seems more enchanted than the Azerbaijanis. According to Baku-based freelance journalist Shonin Abbasov, "to many Azerbaijanis, the prospect of such a resort on Nargin Island seems a touch bizarre."<sup>104</sup>



Nargin Island (Zira Island), desolate and rocky, sits across the bay from Baku. Crumbling buildings speak of the island's violent history.

<sup>99</sup> Zira Island Masterplan, BIG Press release, June 2009.

<sup>100</sup> Ibid.

<sup>101</sup> Swietochowski, T., *Russian Azerbaijan 1905-1920: The Shaping of National Identity in a Muslim Community*. Cambridge University Press, Cambridge, 2004, p. 83.

<sup>102</sup> Deker, N., *Genocide in the USSR: Studies in Group Destruction*. Institut zur Erforschung der UdSSR, Scarecrow Press, 1958, p. 65.

<sup>103</sup> Abbasov, S., "Azerbaijan: Multi-Billion-Dollar Resort Planned for Defense Ministry's Caspian Sea Island", *Euraisianet.org*, April 9, 2009; retrieved on December 7, 2010. In R.J. Rummel's book *Death by Government*, the author claims that the Nargin Island POW camp saw 2,100 out of 3,000 prisoners of war die in just six months during the First World War. See: Rummel, R.J., *Death by Government*. Transaction Publishers, New Brunswick, 1994, p. 402.

<sup>104</sup> Abbasov, S., "Azerbaijan: Multi-Billion-Dollar Resort Planned for Defense Ministry's Caspian Sea Island", *Euraisianet.org*, April 9, 2009.



-  villas
-  community
-  cultural
-  mixed use
-  hotel



**105** <https://www.cia.gov/library/publications/the-world-factbook/geos/aj.html>, retrieved on December 7, 2010.

**106** In Marco Polo's description of a visit to Azerbaijan, the famous traveler describes seeing "a spring from which gushes a stream of oil, in such abundance that a hundred ships may load there at once." Polo, M. translated by Latham, R. *The Travels of Marco Polo*. Penguin, London, 1958.

**107** Yanar Dag is one of the most famous natural gas fires, burning non-stop on a hillside near Baku. Azerbaijan is also the birthplace of Zoroastrianism, a religion with a great reverence for fire in any form.

**108** Azerbaijan's future is intrinsically tied to the world price of oil. In 2009, the government was still dependent on financial transfers from the State Oil Fund to make up for budget shortfalls. Eliminating this dependency is a key part of the national strategy to diversify the economy.

**109** A secret diplomatic cable from the US Embassy in Baku (leaked as part of the famous WikiLeaks cache on December 1, 2010), compared President Aliyev to the two mafia bosses in Francis Ford Coppola's *The Godfather*. According to the document, Aliyev's foreign policy aligns with Michael Corleone's "pragmatism, [and] restraint" and is characterized by "a helpful bias toward integration with the West." His domestic policy, however, is more in line with Sonny Corleone: "increasingly authoritarian and hostile to diversity of political views." On December 7, 2010, WikiLeaks.org was unavailable online. To view the cable "President Ilham Alyev - Michael (Corleone) on the Outside, Sonny on the Inside", see the mirror site: <http://www.powned.tv/wikileaks/cable/2010/02/10BAKU127.html>, retrieved on December 7, 2010.

**110** "Azerbaijan seeks 90 pct hike in defence spending in '11", Reuters, Baku, October 12, 2010.

**111** Since 1992, none of the elections in Azerbaijan have met international (or

## In the land of fire

Azerbaijan declared independence from the Soviet Union on August 30, 1991. The early years of independence saw a war with neighboring Armenia and a series of military coup attempts (and successes). The country regained political stability in the late 1990s and the economy has since profited greatly from the Azeri-Chirag-Guneshli and Shah Deniz gas fields, among others. The completion of the Baku-Tbilisi-Ceyhan pipeline in 2005 allowed Azerbaijan access to a much larger export market, and continues to be the country's major economic driver. Although the economy saw exponential growth between 2006 and 2008 (due to increased oil production and rising prices), the 2008 global financial crisis hit Azerbaijan along with everyone else. In 2009, the GDP growth rate fell to 9.3%—less than half of the 2007 growth rate of 25%—but still high enough to rank third in the world in the aftermath of the crisis.<sup>105</sup>

It was the oil and gas industry that saved the day. Azerbaijan is so loaded with oil and natural gas reserves that some of the country's earliest visitors described seeing oil gushing freely from the ground.<sup>106</sup> The country has long been known as 'the land of fire' because of the hillside fires formed from natural gas seeping through the earth.<sup>107</sup> Today, the country produces more than one million barrels of oil per day, and is considered one of the world's most important sources of oil and gas. After a series of false starts, these natural resources have helped Azerbaijan finance a newfound stability.<sup>108</sup> Currently, the World Bank's *Doing Business Report 2011* ranks Azerbaijan 55th in the world for ease of doing business—the ranking is not great, but it does indicate a huge improvement over recent years.

Considered a South Caucasus success story, Azerbaijan is now a presidential republic led by President Ilham Aliyev and Prime Minister Artur Rasizade. President Aliyev succeeded his father as president in 2003. Aliyev's foreign and domestic policies diverge greatly, and (like many oil-rich nations) his government appears to be moving towards more autocratic operations.<sup>109</sup> A referendum in March 2009 removed term limits for the president, effectively giving 48-year-old Aliyev power for life (the prime minister's position is considered largely ceremonial and politically weak). The recent announcement of a 90% increase in military spending for 2011 also has some foreign diplomats squirming.<sup>110</sup>

Some critics believe that Azerbaijan's economic stability has actually made the government more resistant to reforms. In the run-up to the 2010 parliamentary elections, critics worried that growing restrictions on freedom of expression would make a free and fair vote impossible.<sup>111</sup> After the elections, the opposition alleged fraud in the form of both voter intimidation and preventing the opposition candidates from running in various districts.<sup>112</sup>

According to South Caucasus researcher Giorgi Gogia, "The central public square in Baku, where opposition supporters used to gather, has been turned into a parking lot. The government routinely denies requests to hold demonstrations. Police swiftly and often violently break up

unauthorized protests, often arresting peaceful protesters and journalists documenting police actions."<sup>113</sup> In what some consider another indication of dwindling freedoms, in 2008 the president rescinded licenses for foreign broadcasters. The ban terminated broadcasts by the BBC, Radio Free Europe/Radio Liberty and Voice of America—giving the state a monopoly on domestic airwaves. The incarceration of young bloggers Emin Milli and Adnan Hajizade has been used as another example of the government's increasingly dim view of free public discourse.<sup>114</sup>

## Baku's Staten Island

In the spring of 2008, as oil prices were approaching record highs, the Danish engineering group Ramboll approached BIG to work with them on a project for an Azerbaijani client. The brief presented by the client, Avrositi Holdings, "was to design a proposal for the [Nargin] island that was carbon neutral and was inspired by the mountainous landscape of Azerbaijan."<sup>115</sup> At BIG's suggestion, that proposal became a carbon-neutral eco-island for 10,000 residents. But because of its bloody past and drawing board status, it's difficult to imagine so much life on Zira. What will it be like? Will the island be an enclave for Baku's oil-rich elite? Will the three hotels really boost tourism? Will posh expats snap up the luxury villas or will they sit empty, victims of speculation? If all goes according to plan, BIG's proposal will transform the island into an upscale community "entirely independent of external resources."<sup>116</sup> Will that claim hold up under close scrutiny?

And who will live there? In Azerbaijan, average monthly wages are just AZN 319 (\$400) and the average house size is about 70 m<sup>2</sup>.<sup>117</sup> Villas on the island range in size from 300 to 2,500 m<sup>2</sup>. Much like the Enclave Cities further south, Zira has the potential to become an island of wealth in an extremely striated context. The project website claims that "Zira Island will bring a new level of luxury to Azerbaijan and is destined to be one of the most exclusive developments in the region... An exclusive hideaway for discerning international and regional patrons."<sup>118</sup> However, when asked

even national) standards. The government has twice been convicted of election fraud by the European Court of Human Rights in Strasbourg. In a 94-page Human Rights Watch report released on October 26, 2010, HWR claims that the Azerbaijani government uses both criminal laws and violence to quiet

Plans for the heavy renovation of downtown Baku are called the White City Project. The Green Hill district looks particularly French (top), and boasts the 'landmark' Aypara Residence Building at its center (middle). The waterfront area (bottom) embraces a different aesthetic, foregoing historical imagery for futuristic, pixilated towers. The project is masterplanned by Atkins, with designs by Foster + Partners and F+A Architects.





Oil is Azerbaijan's main export product, and reminders of its presence are everywhere in Baku's cityscape.





critics. See: Beaten, Blacklisted, and Behind Bars: The Vanishing Space for Freedom of Expression in Azerbaijan. Human Rights Watch. October 26, 2010. The entire report is available for download at <http://www.hrw.org/en/reports/2010/10/26/beaten-blacklisted-and-behind-bars>.

**112** "Azerbaijan Election Controversy", First aired November 8, 2010 at 08:34 GMT on Al Jazeera. See: <http://english.aljazeera.net/video/asia/2010/11/201011875513920574.html>

**113** According to Gogia, the repression of Freedom of Expression is most clearly seen in the heavy restrictions on access



1. Savalan



2. Ayidagh



3. Ilandagh



4. Shahdagh



5. Kapaz



6. Beshbarmaq



7. Babadagh



The Valley

The seven peaks of Azerbaijan; namesakes for Zira's collection of buildings.

to material for journalists, harassment, strict regulations and criminal defamation cases against journalists. "One of the most egregious criminal defamation cases was against the outspoken government critic Eynulla Fatullayev, founder and editor-in-chief of two of the largest and most popular newspapers in the country - Gundelik Azerbaijan and Realny Azerbaijan. Fatullayev has been in prison since April

to comment, Kai-Uwe Bergmann, Associate Partner at BIG, disputed this projection. "The island is seen as an extension of Baku—as another neighborhood similar to Staten Island to Manhattan or Bainbridge Island to Seattle or the Lido to Venice. It is true that the island will create a level of privilege but it is not seen as an elitist resort—more [as] a mosaic of lifestyles that make up Baku—especially for those residents who are seeking a sustainable life which offers a safe environment for their families."<sup>119</sup>

In BIG's 'archimonic' manifesto, *Yes is More*, the project is presented as a modern reinterpretation of 'The Seven Peaks of Azerbaijan': Shahdagh, Babadagh, Beshbarmaq, Kapaz, Ayidagh, Ilandagh and Savalan.<sup>120</sup> The project's literature claims that "the seven mountains [buildings] are each an architectural translation of a specific mountain into built form."<sup>121</sup> Looking at the massive constructions individually, however, one is struck by their familiarity. Many of the 'mountains' are approximations of earlier

designs by BIG: Shadagh mountain's Zira Island proxy looks like a scaled-up version of the Holstebro Handball Arena, while the walking path along the top of Kapaz seems to be a direct interpretation from the proposed Trysil Ski Resort Hotel. Babadagh recalls the Double Perimeter Block project in both its peripheral form and its single raised corner (under which boats sail through to interior harbors in the renderings for both projects). Although they might induce some raised eyebrows, the recycled projects are not necessarily a negative reflection on BIG, and they don't inherently make the 'mountain' iconography untrue. Using references from their catalogue of unbuilt works to populate the masterplan provides a clearer sketch with which to drive the development. And, of course, as in most projects, the final result may differ greatly from the initial proposal.

## Zira 'Zero'

In BIG's masterplan, residential and leisure facilities are clustered on the western end of the island. The 'Seven Peaks' are placed around the perimeter of this half like equidistant children's blocks. There is not much attention given to the relationships between the buildings; all seven megaliths appear to be placed primarily to give optimal views over the Caspian Sea. Because the individual constructions are each so massive, the buildings create semi-urban commercial environments without interacting at a larger scale. The gaping in-between space is given life by translating wind patterns into a colorful, swirling hardscape.

The island's eastern edge is sprinkled with villas cascading towards the water. The center of the island is left void of built forms: one half is a park, the other is a sprawling golf course. Some roads and a single meandering walking path connects the island—giving islanders the unique opportunity to metaphorically scale all seven peaks in a single day. On the western end, a large marina half encircled by the branching 348,399 m<sup>2</sup> Savalan complex gives way to shopping streets and restaurants, pavilions and a park cafe. At the nexus of Savalan's three main branches, the building swoops in two directions, enfolding a massive water park and series of sports fields. A small 'urban beach' sits between the tips of Savalan and Beshbarmaq's slanted towers. Across the Central Valley, Ayidagh lies on the northern coast of the island—perhaps the most literal 'mountain' form, with stacked commercial and residential spaces. A central hall is carved out of the center, providing a huge interior public venue.

East of Ayidagh, Ilandagh appears in plan as a precise cross, with each extremity oriented toward a cardinal point. In profile, according to BIG, "two silhouettes intersect like a hybrid between an x,y,z graph and Ville Radieuse."<sup>122</sup> The four quadrants on the ground level are occupied by a 'restaurant plaza', 'terrace plaza', 'lobby plaza' and 'pool plaza'. A larger 'event plaza' next to Ilandagh acts as a buffer zone before the perforated mound of Shahdagh begins. Shahdagh's perfectly square floor plan resembles a chessboard, an intentional "homage to Kasparov, native son of Baku."<sup>123</sup>

South of Shahdagh, the star-shaped Babadagh encompasses another marina and boardwalk. A long strip of beach runs along the coastline west of Babadagh, at the narrowest part of the island. Across the park to the north, the massive Kapaz occupies a semi-circular strip around the original harbor. Kapaz will act as the main arrival point on the island, as



The model of Ilandagh reveals the literal profile of the mountain.

**114** The satirical bloggers were attacked in a restaurant, and after going to the police as victims, found themselves charged with 'hooliganism and violence' and sentenced to two and a half years in prison. In November 2010 they were unexpectedly released after the imprisonment drew international criticism. See: Ismayilova, K., "Azerbaijan: After Release, Blogger vows to seek Exoneration", Eurasianet.org, November 19, 2010. <http://www.eurasianet.org/node/62408>, retrieved on December 10, 2010.

**115** Bergmann, Kai-Uwe. "Zira Island", Email to the author, December 8, 2010.

**116** <http://www.ziraisland.com/>, retrieved on December 10, 2010.

2007. He was convicted of both civil and criminal defamation for a newspaper article and Internet posting about the 1992 Khojali massacre, during the war between Azerbaijan and Armenia over the disputed territory of Nagorno-Karabakh. The article questioned the version of the Khojali events most commonly accepted in Azerbaijan. Six months later, Fatullayev was found guilty of terrorism and inciting ethnic hatred for other articles, giving him a total sentence of eight-and-a-half years." See: Gogia, G., "Opinion: Oil rich but rights poor in Azerbaijan", GlobalPost, November 4, 2010.

**117** BTC Project Action Resettlement Plan Azerbaijan Final Report. RAP Socio-Economic Survey 2002. International Finance Corporation. See also: "Real Average Salary Drops in Azerbaijan", News.az, October 23, 2010. See: <http://www.news.az/articles/economy/25168>, retrieved on November 29, 2010.

**118** <http://www.ziraisland.com/>, retrieved on December 10, 2010.

**119** Bergmann, Kai-Uwe. "Zira Island", Email to the author, December 8, 2010.

**120** See: Ingels, B., Yes is More: An Archicom on Architectural Evolution. Evergreen, 2009.

**121** Ingels, B., Yes is More: An Archicom on Architectural Evolution. Evergreen, 2009, p. 165.

**122** Op. cit., p. 169.

**123** 'Kasparov' refers to Garry Kasparov, a chess prodigy and World Chess Champion. See: Op.cit., p. 170.

**124** The National Program was conceived in line with paragraph 19 of the decree of President of Azerbaijan Republic No. 612 on December 26, 2001. Azerbaijan Republic National Program on Environmentally Sustainable Socio-economic Development, UNDP, Baku, 2002, p. 3.

**125** Op. cit., p. 6.

there are plans for a shuttle ferry to dock here. The rest of the marina will be renovated into a sinuous curve within the convex form for private boats.

Where the island widens again the park turns into a golf course, lined on the northern coast by 'water villas' with private docks, and insulated on the southern coast by terraced 'hill villas'. The hill villas stretch to the west, becoming 'beach villas' as another sandy strip emerges. Behind the villas, the golf club sits at the periphery of the golf course. The western tip of the island is populated by just three enormous villas. Each 2,500 m<sup>2</sup> villa has an individual dock and private beachfront. The three houses share a centrally-located helicopter landing pad.

The proposal's theme park character is in shiny-happy contrast to the island's fog-covered reality. Sparkling renderings with blue skies and tropical foliage look more like images from a World Expo—temporary and exuberant. The plan is supposed to be a distraction from old Baku, and it certainly succeeds in that, but there is something a little too sterile, a little too innocent; a certain sense of misdirection that makes the proposal almost suspicious. Of course, the buildings presented in renderings are rarely precisely constructed, but there is such a large disconnect between the shimmering images and the reality of Nargin Island, that one imagines BIG is designing for Las Vegas rather than a rocky outcrop with decades of sordid history. The plan is contextual in only the most superficial way, using names and silhouettes of Azerbaijani mountains as the starting point for architecture.

## The only way out

Azerbaijan's interest in environmental protection at a national level is about a decade old. In 2001, Azerbaijan began development and implementation of the National Program on Environmentally Sustainable Socio-economic Development. The Program addressed issues of sustainable development, and was prepared by the Ministry of Ecology and Natural Resources.<sup>124</sup> Many of the environmental problems facing the former Soviet state stem from its use as a center of chemical production under the USSR, as well as its current oil production and extraction methods. In 2001, these problems included: "a lack of drinking water in Baku and other major cities, pollution of the Caspian Sea and other water reservoirs, damage made as a result of changing levels of the Caspian Sea, excessive discharge of hazardous gases into the atmosphere, erosion and salination of agricultural lands, failure to ensure effective waste management in major industrial centers and human settlements, and lack of disposal facilities."<sup>125</sup>

Since 2001, there has been growing concern for a more sustainable future. In a speech at the 90th anniversary of the State Oil Academy, in 2010, President Aliyev confirmed his desire to move away from an oil-dominated economy, while simultaneously defending Azerbaijan's exploitation of its natural resources: "Certainly, today we are seeking not to depend on oil and gas. This is the essence of our strategic course. We want the non-oil

sector to develop. But we must approach all issues in real terms. How could we have developed the non-oil sector without this strong, natural resource? We had no money, financial means. The treasury was empty in the early 1990s and funds there were misappropriated. In the early 1990s foreign financial structures viewed Azerbaijan as a risky country, no one wanted to extend loans to us... Therefore, the implementation of the oil strategy was the only way out for us... If we had not born this pressure, had not demonstrated courage and determination, we could have been knocked off course, which would have been a tragedy for our country."<sup>126</sup>

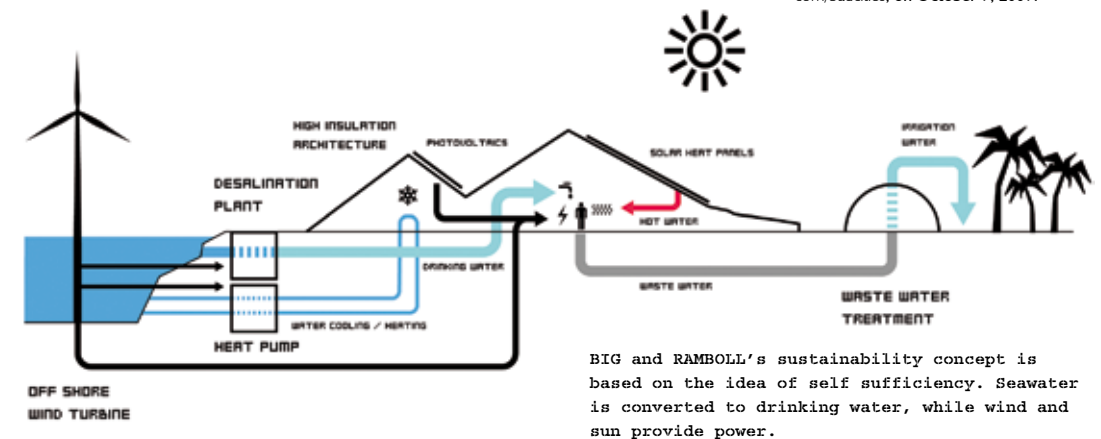
According to Ali Abbasov, Minister of Communication and Information Technology, Azerbaijan is serious about cleaning up its act. "During the Soviet period, Azerbaijan was one of the centers of chemical industry, and we all know what that meant for its ecology. So resolving our region's environmental issues is one of our main political goals, and information technology will play a massive role."<sup>127</sup> The Zira Island project is in line with those goals. According to BIG founder Bjarke Ingels, the architects' proposal for the island, "not only recreates the iconic silhouettes of the seven peaks, but more importantly creates an autonomous ecosystem where the flows of air, water, heat and energy are channeled in almost natural ways. A mountain creates biotopes and eco-niches, it channels water and stores heat, it provides viewpoints and valleys, access and shelter. The Seven Peaks of Azerbaijan are not only metaphors, but actual living models of the mountainous ecosystems of Azerbaijan."<sup>128</sup>

**126** "Azerbaijan 'no longer in transition' – president", News.az, November 24, 2010. See: <http://www.news.az/articles/economy/27001>, retrieved on November 29, 2010.

**127** "Azerbaijan Aims for Hi-Tech State", Euronews, November 26, 2010.

**128** Bjarke Ingels, quoted in press release, "Zira Island Masterplan", BIG, June 2009.

**129** Ironically, Zira Island is also located only 50 km south of the infamous Sumgayit, Azerbaijan. Sumgayit used to be "the New Jersey of the Soviet Union—the town was the nation's center of chemical and pesticide production. Today, it is still feeling the after effects of years of untreated, mercury-contaminated waste dumped directly into streams feeding the Caspian Sea. Cancer rates in the city of 275,000 are sky-high. The World Bank has stepped in for the city, which was declared an environmental disaster area, and is helping to clean up old plant sites." See the study by the Blacksmith Institute/Adam Klaus, retrieved from <http://www.popsoci.com/badcities>, on October 9, 2009.



Eleven kilometers off the coast of Baku, and another ten from at least four major oil rigs, Zira Island is accessible only by helicopter or boat.<sup>129</sup> The island's proposed self-sufficiency relies mainly on the use of various technologies, in contrast to Masdar's combination of passive and active systems. Photovoltaics will supply energy to heat water and power recreation spots such as swimming pools and water parks. The Caspian Sea itself will be responsible for heating and cooling all the buildings on the island. The seawater will also be filtered in an on-site desalination plant to provide the residents with fresh drinking and bathing water. Greywater





A site plan for the island shows the seven 'mountains' gathered around a central green space. The eastern side of the plan is occupied by groups of villas, surrounding a golf course. Three man-made harbors provide docks for private yachts. The organization is not so much a masterplan as a collection of objects in space.

**130** BIG clearly has high hopes for transforming the island: the image of a 'lush', 'tropical' island is fairly incongruous with current conditions: fog cloaks the island most of the time, and the barren, windswept isle averages 15°C. Press release, "Zira Island Masterplan", BIG, June 2009.

will be used to irrigate the landscape, and solid waste will be processed into fertilizer. In BIG's press material, the office claims that, "the constant irrigation and fertilizing of the island supports the lush green condition of a tropical island, with a minimal ecological footprint."<sup>130</sup> Sixteen wind turbines in an offshore wind farm will provide the city's CO<sub>2</sub>-neutral power supply, providing an interesting contrast with the surrounding offshore oil platforms.

The eco-friendly accessories sound like a checklist. Photovoltaics? Check. Wind farm? Check. Greywater irrigation? Check. Zira's breezy solution to clean water—desalination—is a familiar panacea in the world of eco-cities, but the energy-intensive technology is hotly debated among scientists. Not everyone embraces desalination as a silver bullet. In fact, Zira's list of eco-credentials is hardly the innovative novelty one might expect from such a fantastical project. It almost seems like the island is just a resort with the trendy trappings of sustainability. No information is yet available on how the islanders will produce food or manage their inorganic waste. One might also raise questions about the resources and materials used to build the city. What will they be? Where will they come from? All of these factors present challenges to the island's ultimate goal of carbon-neutrality.

## A comprehensive plan

As a relatively young contender, Azerbaijan is quickly learning what it takes to compete on the world stage. In 2007, Baku bid to host the 2016 Olympic Games, but poor infrastructure cost the city its candidacy.<sup>131</sup> In spite of its loss, the bid helped bring Baku international attention and increased foreign investment and tourism. Since then, the nation has been on a mission personally decreed by President Aliyev.

Aliyev's intimate involvement stretches to the Azerbaijani capital's architectural presence. Much like his neighbor to the north, President Nazarbayev of Kazakhstan, Ilham Aliyev is keen to immortalize his reign with ambitious architectural projects. Aliyev has already used the country's oil profits to fund some bold theatres and business centers in the nation's capital.<sup>132</sup> Besides supplying the requisite architectural glamour, the Zira Island project also falls in line with national ambitions to diversify the oil-based economy and refashion the Azerbaijani identity on the global stage.

In September 2006, Aliyev announced the 'Comprehensive Action Plan for Improving the Ecological Conditions in the Azerbaijan Republic during 2006-2010.' As part of this initiative, the Zira Island masterplan was approved by the president's office in November 2008. In addition to BIG's

**131** Unofficial estimates put Baku's population at four million—twice the number of inhabitants the city's infrastructure was designed to support. See: Akbarli, M., "Azerbaijan: Olympic Dreams Fuel Construction Boom, But Public Loses" Radio Free Europe Radio Liberty, March 26, 2008.

**132** Ibid.



BIG's proposal for the island looks almost mystical, bathed in the reflected light of a perfect sunset. The rocky outcrop of Nargin Island is nowhere to be seen, and instead the island appears to be a flat plane with artificial 'mountains' placed on top.



The roof of one 'mountain' becomes a pedestrian pathway, giving views back towards Baku. The rocky, abandoned island has been transformed into a clean and antiseptic environment.





**133** In late November 2010 the project was presented in Kiev as part of the Investment Summit of CIS and Middle Eastern Countries. "Baku-white city project takes part in investment summit in Kiev", *News.az*, December 3, 2010.

**134** [http://www.azstat.org/statinfo/consumermarket/en/ten\\_3.shtml](http://www.azstat.org/statinfo/consumermarket/en/ten_3.shtml), retrieved on December 9, 2010.

**135** Abbasov, S. "Azerbaijan: Ex-Guggenheim Director Betting on Bilbao-Style Project for Baku", *Eurasianet.org*, February 2, 2010. <http://www.eurasianet.org/departments/insight/articles/eav020310.shtml>, retrieved on December 9, 2010.

**136** Allegedly, Radio Liberty's 'mocking' of the 162-meter-high flagpole enraged Aliyev and may have contributed to his subsequent rescinding of licenses for foreign broadcasters.

**137** Swietochowski, T., *Russia and Azerbaijan: A Borderland in Transition*. Columbia University Press, 1995, p. 69.

**138** Bergmann, Kai-Uwe. "Zira Island", Email to the author, December 8, 2010.



Rusted ships lie abandoned on the shore of Nargin (Zira) Island, 2010.

project, the Executive Administration of Baku City is also drafting a 'Baku White City' masterplan in collaboration with Atkins, F+A Architects and Foster + Partners, approved by the president's office in May 2010. The plan covers ten city districts, affecting 50,000 inhabitants.<sup>133</sup>

Rather than follow a piecemeal development process, the Aliyev administration has been thinking big. The Zira Island project, Baku White City masterplan and Baku-Azerbaijan Eco-Cultural Masterplan are all symptomatic of a larger movement within the region to diversify from an oil-based economy into tourism and technology. According to the State Statistics Committee, the total number of hotels in Baku increased by 22% between 2008 and 2009—a massive growth in the midst of the global economic crisis.<sup>134</sup> The jump in hotel construction is indicative of the city's ambitious plans for the future.

Since early 2010, former Guggenheim museum director Thomas Krens, Asymptote Architecture and Krens's New York-based consulting group, Global Cultural Asset Management (GCAM), have been working on another major urban overhaul for the region: the Baku-Azerbaijan Eco-Cultural Masterplan. The proposal would transform Baku's waterfront into an 'eco-cultural zone', creating a barrier to purify water within the confines of the zone and a 90-minute walking path dotted with art installations by celebrity artists Jeff Koons, Anish Kapoor and Richard Serra, as well as towers by Frank Gehry and Asymptote Architecture.<sup>135</sup> Construction has already started on parts of the design, including the world's tallest flagpole in a former Soviet harbor.<sup>136</sup> The grand redesign is part of the national campaign to rebrand the country, a process made famous by Thomas Krens's Guggenheim Bilbao project. Locals hope for the same 'Bilbao effect' in Baku. The effort seems to be gaining ground; in 2009, Baku was named the Islamic Cultural Capital of the year—quite an honor for the capital of the first secular republic in the Muslim world.<sup>137</sup>

### Zira's foggy future

The Zira Island development is made possible by state financing, private sector sponsorship and individual investors. The land itself is state owned, but the project's mysteriously obscure client, Avrositi Holding, has somehow managed to get permission from the Ministry of Defense to build on the island. Details on Avrositi Holding are murky. Led by Chief Executive

Officer Oguz Erkan, a Turkish national, the company claims to be one of the leading real estate developers in Azerbaijan, with a strong focus on luxury residential and tourist developments. However, the company's website lists only two developments: the Zira project and the Amethyst project, three high-rise residential towers in downtown Baku. According to BIG's Kai-Uwe Bergmann, Avrositi is "made up of a variety of businesses all dealing with construction. They only wish to publicize the projects which are on their website."<sup>138</sup>

Since independence, there have been proposals for casinos and themed amusement parks on the island, none of which materialized.<sup>139</sup> According to some observers, the president did not allow these developments because of Nargin Island's central location in the middle of Baku Bay. Any aesthetically unappealing project would ruin the entire city's view of the Caspian Sea. BIG's design also faced several presidential rejections before gaining approval in 2008.

In preparation for the development, the Oil and Gas Construction Trust and the Caspian Oil Fleet of the State Oil Company of Azerbaijan Republic (SOCAR) laid 17 km of water and gas pipelines, connecting the uninhabited island to Baku.<sup>140</sup> Although there is little information available regarding state involvement in the project, the SOCAR pipeline indicates that there is strong interest in creating a habitable island at the national level.

Since 2009, however, the project has been on hold. According to Kai-Uwe Bergmann, "The project is on hold as it was primarily seen as a means to interest foreign investment in the country... when the entire global financial system contracted in fall 2008 through today it severely affected the ability to seek out those funds and thus has since been placed on hold until the financial investment climate changes."<sup>141</sup>

Although it is unclear when, if ever, Zira will see completion, the island has actually already done its job. As a vehicle for attracting global media interest to Azerbaijan, Zira has worked wonders. Every major design website and blog has featured the project at least once, and *TIME* magazine even included it in 'The Green Design 100', a special report on how, "the rarefied world of design is embracing the environment as never before."<sup>142</sup> From June until December 2010, the project was exhibited as part of BIG's first solo exhibition at the *arc en rève centre d'architecture* in Bordeaux, France. Also featured in BIG's 'manifesto of popular culture', the 2009 publication *Yes is More*, the project has already had more than its fifteen minutes.<sup>143</sup>

As an attractor mechanism, even unbuilt Zira has paid its dues, but one still shouldn't underestimate the involvement of cultural bigwigs like Thomas Krens. Where Krens goes, investment seems to follow. His support for the complimentary Baku-Azerbaijan Eco-Cultural Masterplan, coupled with Aliyev's clear trajectory for the country's future, make Zira's construction seem likely. Ironically enough, however, the future of BIG's carbon-neutral eco-island is ultimately connected to the fluctuations of the crude oil market. With the price per barrel forecast to rise steadily over the coming years, it looks like Zira 'Zero' may indeed get another chance.<sup>144</sup>

**139** Abbasov, S., "Azerbaijan: Multi-Billion-Dollar Resort Planned for Defense Ministry's Caspian Sea Island", *Eurasianet.org*, April 9, 2009; retrieved on November 29, 2010.

**140** "Construction of water pipeline to Nargin Island completed", *SOCAR News*, January 30, 2008. <http://www.socar.az/945-news-view-en.html>, retrieved on December 9, 2010.

**141** Bergmann, Kai-Uwe. "Zira Island", Email to the author, December 8, 2010.

**142** Kroll, B., "The Green Design 100", *TIME*, April 24, 2009.

**143** Ingels, B., *Yes is More: An Archicomic on Architectural Evolution*. Evergreen, 2009.

**144** Lewis, B. and Lawler, A., "Oil chiefs predict long-term price strength", *Reuters*, May 26, 2010. See also: Habiby, M., "U.S. Boosts 2011 Oil Forecast on Economic Outlook", *Bloomberg Businessweek*, October 13, 2010.



The need for a more ecologically-sound approach becomes obvious when one sees the pollution caused by oil production in Azerbaijan.



"Every physical aspect of the Political City is intrinsic to an understanding of the nation itself."

## Chapter 2: Political Cities: Shifting Capitals and Manufacturing Identity

145 Kostof, S., *The City Shaped*, Thames and Hudson Ltd., 1991, p. 184.

Political New Towns carry a heavy burden. As representatives of emerging nations, they are cultural indicators at both domestic and international scales. A nation's political, social, and economic ambitions must be matched by the grandeur and majesty of its capital. Political doctrine must be translated into street organization and axial alignment. Social policy must be evident in the housing supplied for the masses or equally evident in the lack thereof. In an autocratic regime, the leader's palace must inspire a sense of greatness; a belief in the righteousness of his or her leadership.

Every physical aspect of the Political City is intrinsic to an understanding of the nation itself. In the following case studies, Astana, Kazakhstan, reveals the grandiose ambitions and taste for opulence in a young, oil-rich former Soviet state. The marble-clad presidential palace at the center of the city is an indication of President Nazarbayev's political longevity. Naypyidaw, the new capital of Myanmar set amidst jungle and rice paddies, is a visual reminder of the junta's crippling paranoia. The city's illogical organization reflects that nation's plethora of troubles and political intrigue. The juxtaposition of private villas with infinity pools behind heavily guarded gates adjacent to subsistence farming is an indication of the government's rampant corruption.

As Spiro Kostof states in *The City Shaped*, the imperfect concentric organization evident in Astana creates "a strong visual projection of the all-pervasive nature of absolute power."<sup>145</sup> In Naypyidaw, though the organization is less geometric, it is certainly no less divisive. While Astana's radial-concentric organization more visually conveys the country's centralized political system, Naypyidaw's weird linear organization is without precedent. Partly due to the mountainous terrain, and perhaps equally due to the junta's preoccupation with division and isolation, the capital sprawls across the landscape in such a low density that one hesitates to call it a city at all. There can be no doubt as to the hierarchy of spaces in either New Town.

Both of these new Political Cities play a role in developing their respective nation's identities. For Kazakhstan, building Astana was an opportunity



**146** This quote from Nursultan Nazarbayev appears on the heading banner of the official Astana website. See: <http://www.astana.kz/en/node/8592>, retrieved on February 2, 2011.

to define itself in contrast to a sorrowful Soviet history. For Naypyidaw, relocating the capital from Yangon (Rangoon) presented a chance to put physical distance between the capital and the (real or imagined) threats of insurgency and invasion. In terms of marketing these ideological shifts, however, Astana's clever, targeted advertising contrasts profoundly with Naypyidaw's stealth construction. Naypyidaw was built in secrecy and only announced when it was ready to house occupants. The junta's furtiveness resulted in a new capital that is still relatively unknown, unpublished, and unexamined. Because of the heavy restrictions on releasing material, obtaining reliable information about this city is hugely problematic.

Astana, on the other hand, was a celebrated part of Kazakhstan's nation-building from the start. While the capital remained at Almaty, an international competition with world-renowned architects set the tone for the city's grand entrance. Throughout construction, Astana was lauded by the president as a "personification of a new, dynamically developing Kazakhstan, a symbol of renewal, a symbol of independence of our republic!"<sup>146</sup> Today, Astana scrambles to host events like UN conferences on nuclear disarmament, interfaith and interethnic round tables, and discussions on humanitarian cooperation, because of the global impression these events convey. Despite Kazakhstan's ongoing corruption scandals and ethnic tensions, the city's promotion has been so effective that Astana won the bid to host the 7th Organization for Security and Cooperation in Europe (OSCE) Summit in 2010.

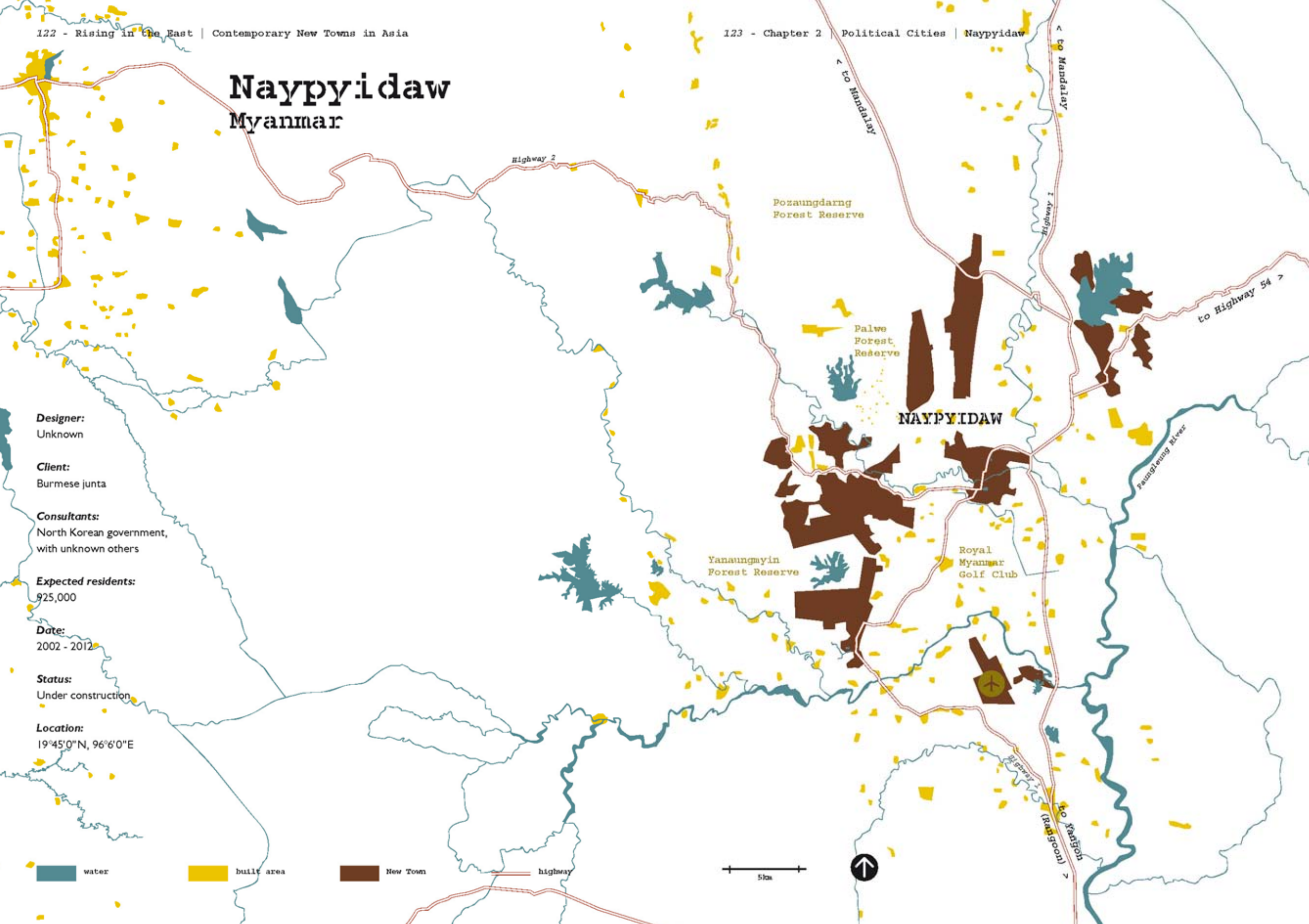
Contemporary Asian counterparts follow in the footsteps of world-famous Political Cities like Brasilia, Canberra, Saint Petersburg, Chandigarh, Abuja and Washington, DC. As planned administrative capitals, these cities have faced the various pitfalls endemic to their typology. Political Cities risk falling prey to a commuter population, left empty and lifeless from dusk to dawn. They risk a shortage of culture and a uniform demographic of civil servants. But they have the advantage, oftentimes, of attracting the wealthiest subsection of the population. Especially in countries where nothing occurs without government involvement, the administrative center invariably becomes the economic heart of the nation. As national capitals, Naypyidaw and Astana reflect this phenomenon. In the following case studies, these Political Cities reveal much about the underlying ambitions of their makers.



President Jiang Zemin rides by a Chinese Military Parade, 1999.



# Naypyidaw Myanmar



**Designer:**  
Unknown

**Client:**  
Burmese junta

**Consultants:**  
North Korean government,  
with unknown others

**Expected residents:**  
925,000

**Date:**  
2002 - 2012

**Status:**  
Under construction

**Location:**  
19°45'0"N, 96°6'0"E

water

built area

New Town

highway

5km







### Stars in their eyes

At the astrologically auspicious time of 06:37, on November 6, 2005, high-ranking members of the Burmese junta lined up in convoy and drove more than 400 km north to a secret New Town still under construction in the middle of the interior jungle.<sup>147</sup> As the residents of Yangon (Rangoon) eased into the day, the army's move under cover of darkness remained a mystery. Since 2002, laborers had been toiling in secrecy, constructing palatial houses, offices, apartment buildings and airstrips. The residents of Yangon did not learn that they no longer lived in the capital city until Naypyidaw Myodaw was officially announced five months later. Government employees and civilians alike were shocked at the move. At the time of relocation, the unfinished city in Pynmana (Yamethin District, Mandalay Division) lacked basic infrastructure (e.g. phone lines), malaria was endemic and the site was prone to earthquakes.

By the time the first convoy arrived in November the city was well underway, but still dramatically isolated. During a regularly scheduled press conference on the following Monday, information minister Brig-Gen Kyaw Hsan "confirmed the relocation... saying the move was being made to help government operations run more 'smoothly.' He declined, however, to elaborate further."<sup>148</sup>

The reasons for relocating the city thus remain shrouded in mystery. Some have suggested that the junta's paranoia had converted a foreign attack by sea into a likely scenario, and for this reason they moved halfway across the country into the central jungle. Domestic unrest may have also been a factor: Yangon was the site of major political demonstrations in both 1988 and 2007, and police forces had a difficult time subduing the protestors in both uprisings. Within the government, the Information and Propaganda Minister suggested that the "move was due to better communication lines at Pynmana" (26 km from Naypyidaw).<sup>149</sup> The Minister's argument is perplexing as cell phones did not receive a signal in Naypyidaw until four years after the move, and government officials are still said to communicate by walkie-talkie. One of the most baffling and widely reported possibilities is that the personal superstitions of Senior General Than Shwe (known as 'Number One') contributed to the decision based on an astrologer's claims that Yangon "would soon collapse."<sup>150</sup> In a country with one of the worst human rights violations records and consistently fraudulent elections, Number One's soothsayer may not be so far off.

### The generals in their labyrinth

For the last twenty years, up until the March 2011 elections, Myanmar has been ruled by a military junta known as the State Peace and Development Council (SPDC).<sup>151</sup> In a surprising turn of events that officially ended those decades of military rule, Senior General and former Chairman of the Council Than Shwe stepped aside, relinquishing the reigns to his former second-in-command and triggering murmurs of a return to democratic rule. The elections put former Prime Minister Thein Sein in power as

<sup>147</sup> Zaw, A., "Moving Target", *The Irrawaddy*, November 9, 2005. There is historical precedent for this style of decision-making in Burma. In 1948, the country's independence was announced at 4:25 a.m. on January 4, 1948, at the recommendation of an elite group of Buddhist astrologers.

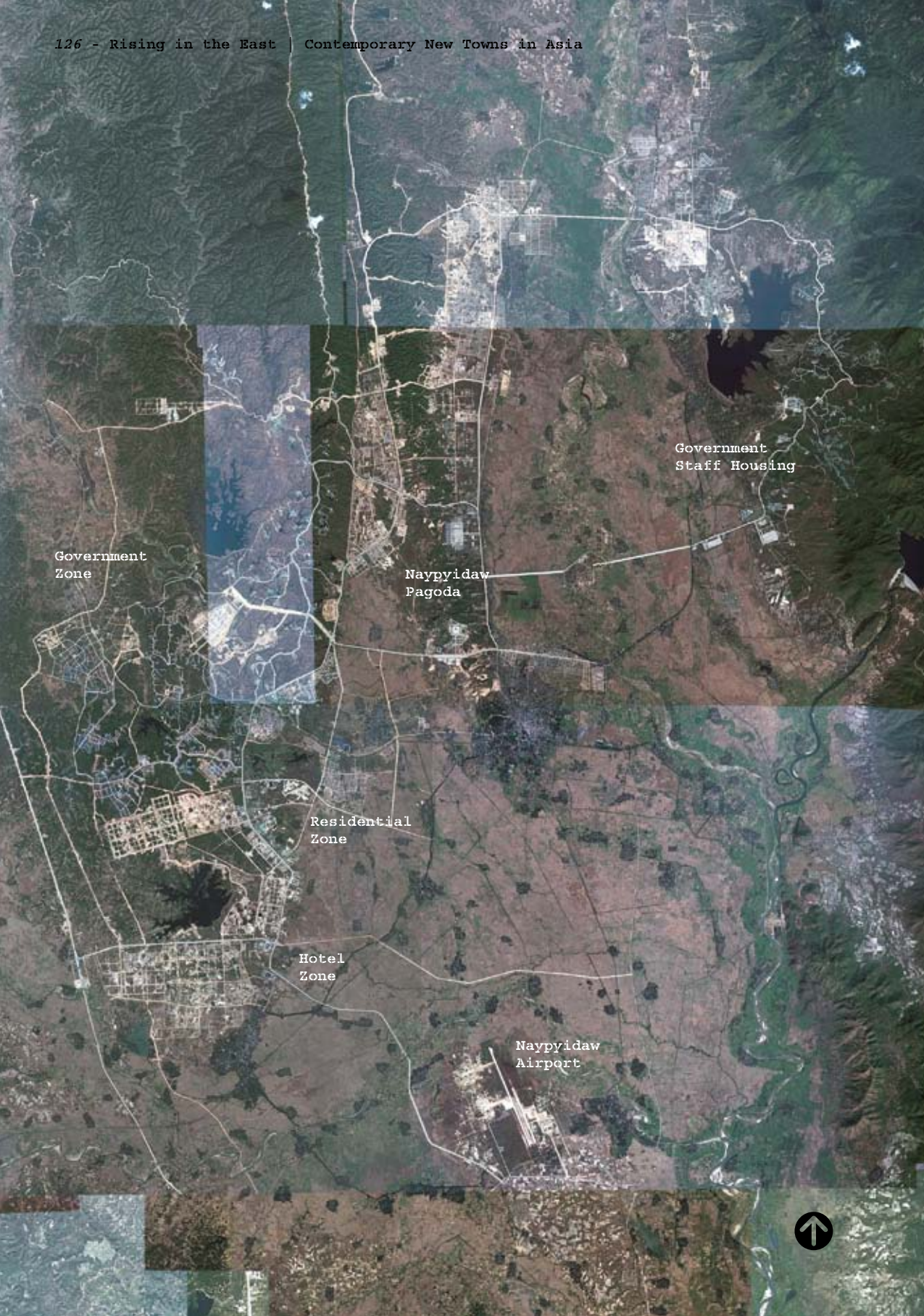
<sup>148</sup> Ibid.

<sup>149</sup> Charney, M. W., *A History of Modern Burma*. Cambridge University Press, Cambridge, 2009, p. 195.

<sup>150</sup> Ibid., p. 193.

<sup>151</sup> The SPDC was formerly the State Law and Order Restoration Council, or SLORC, from 1988-1997. The SLORC technically lost power in 1990 when the National League for Democracy won the national election brought about by huge popular uprisings in 1988. According to David Scott Mathieson, "the election itself was a surprisingly free and fair process which delivered a resounding defeat for the military regime, as the opposition National League for Democracy (NLD) won more than 60% of the popular vote and 80% of parliamentary seats. Yet the stunned regime recovered its balance, refused to hand over power, and restored its security; in the process it reinvented itself from the State Law and Order Restoration Council (SLORC) to the State Peace and Development Council (SPDC)." The SPDC had 11 members, all heads of semi-autonomous regional military commands. As of March 2010, members included Senior-General Than Shwe, (Chairman of the SPDC, Commander-in-Chief of Defence Services), Vice Senior General Maung Aye, (Deputy Chairman of the SPDC, Deputy Commander-in-Chief of Defence Services, Commander-in-Chief of the Army), General Thura Shwe Mann, (Joint Chief of Staff of the Army, Navy and Air Force), General Thein Sein, (Prime Minister), General Thiha Thura Tin Aung Myint Oo, (Secretary - 1 of the SPDC, Quartermaster General), Major-General Ohn Myint, (Chief of Bureau of Special Operation - 1







Kachin State, Mandalay Division, Chin State, Sagaing Division), Lieutenant-General Min Aung Hlaing, (Chief of Bureau of Special Operation - 2 Shan State, Kayah



General Than Shwe graces the October 19, 2009, cover of *TIME* magazine.

State), Lieutenant-General Ko Ko, (Chief of Bureau of Special Operation - 3 Bago Division, Ayeayawady Division), Lieutenant-General Tha Aye, Chief of Bureau of Special Operation - 4 Karen State, Mon State, Tanintharyi Division), Lieutenant-General Myint Swe, Chief of Bureau of Special Operation - 5 Yangon Division), Lieutenant-General Khin Zaw, (Chief of Bureau of Special Operation - 6 Magwe Division, Rakhine State), Major-General Hla Htay Win, (Chief of Armed Forces Training), Lieutenant-General Tin Aye, (Chief of Military Ordnance), Lieutenant-General Thura Myint Aung, (Adjutant General). <http://www.hrw.org/en/news/2010/06/10/burma-s-authoritarian-upgrade-1990-2010>, retrieved on June 23, 2010.

<sup>152</sup> <http://www.refintl.org/blog/waiting-other-shoe-drop-burma>, retrieved on June 22, 2010.

President of Myanmar. Although observers pointed to vote rigging and the dubious retention of 90% of serving ministers, the international community applauded the elections. Since nominally giving up power, however, many sources believe that Than Shwe continues to direct the show from behind the scenes. How much power he actually has and what his real role might be, remains—like so many things in this country—shrouded in speculation.

The junta gained power on September 8, 1988 when the State Law and Order Restoration Council (SLORC), was formed after a coup by the Burmese Armed Forces. Led by General Saw Maung, the army seized control and eliminated all organs of state power that had been put in place by the Burma Socialist Programme Party (BSPP) and the 1974 Burmese constitution. General Maung led the SLORC until he was replaced as both Prime Minister and Senior General by Than Shwe in 1992. On the advice of an American public-relations firm, the SLORC was nominally reconstituted as the SPDC five years later, although most of its organization remained unchanged. The Council was then officially dissolved in March 2011, and one of the junta's puppet groups, the Union Solidarity and Development Association (USDA) was re-imagined as the current majority political party: the Union Solidarity and Development Party (USDP).

Throughout its rule, the military regime has been notorious for its total lack of transparency. Contemporary Myanmar is basically a police state. Informants and spies keep average citizens in constant fear. In a country where rulers arbitrarily switch which side of the road to drive on and printed denominations of money can be declared void on a whim, a sense of security is largely absent. Human rights violations have shadowed the junta, freedom of speech is nonexistent and the government tightly controls almost all media outlets.<sup>152</sup> In an interview with local newspaper *The Irrawaddy*, 83-year-old Tin Oo, Vice Chairman of the opposition party, National League for Democracy (NLD), said, “We have a saying in Burma: ‘What are the three happiest days in a man’s life? Answer: the day he leaves the monkhood, the day he gets married and the day he is released from prison.’”<sup>153</sup> Tin Oo’s release from prison was somewhat less joyous, as he was immediately flown home to be placed under house arrest. Chairman of the NLD party, and perhaps the most well-known Burmese political dissident, is Nobel laureate Aung San Suu Kyi.<sup>154</sup>

After the elections of 1990, the SLORC began a systemized attack on both the NLD and Aung San Suu Kyi personally. In a radio broadcast from 1992, the SLORC argued that Aung San Suu Kyi did not represent the Burmese, but rather the “foreign imperialist powers who ‘continue their habit of brutally bullying the weak and interfering shamelessly in the internal affairs of other countries.’”<sup>155</sup> Aung San Suu Kyi was back in the spotlight in 2009 when an American civilian allegedly swam to her house across a lake, ‘violating’ the terms of her house arrest. The SPDC used the event

to sentence her to eighteen more months under house arrest, making her illegible for office in the widely disputed 2010 elections. Because of her detainee status, the junta declared the NLD party illegal, and ordered it to disband. She was finally freed in November 2010, though she remains under close scrutiny.

The military regime also has a contentious relationship with the many ethnic minorities in Myanmar. The diverse population is made up of roughly 68% Bamar, 9% Shan, 7% Karen, 4% Rakhine, 3% Chinese, 2% Mon, 2% Indian and 5% other ethnicities.<sup>156</sup> To avoid persecution, huge numbers of Burmese have fled to neighboring countries. According to the US Department of State, there are nearly 150,000 Burmese refugees living in nine refugee camps along the border in Thailand. Another 28,000 Rohingya (a Muslim minority) are living in two official refugee camps in Bangladesh, “and more than 200,000 unregistered Rohingya live in surrounding towns and villages outside of these two camps. More than 61,000 Burmese (mostly Chin and Rohingya) are registered by the United Nations High Commissioner for Refugees (UNHCR) in Malaysia. Up to 100,000 unregistered Burmese Chin are living in Mizoram State with another 4000 UNHCR-registered Burmese (primarily Chin) in Delhi, India.”<sup>157</sup>

### Out of sight, out of mind?

Strangely enough, Naypyidaw is not the first time the military junta has attempted to relocate the capital of Burma.<sup>158</sup> In mid-April 1990 the SPDC (then known as SLORC) announced plans for a ‘supercity’ to the south of Rangoon. The unbuilt capital was planned as “a 1600 km<sup>2</sup> city, to be completed by 2005... a new center for economic growth in the entire Indian Ocean area... The city would include 25 zones according to function, linked by advanced telecommunications and transport, and an ‘emphasis on flow of information rather than materials’ as well as 4,000 man-made lakes, highways and offices built to give it an ‘atmosphere of resort.’”<sup>159</sup>

More than a decade later, the new capital would eventually be built on a site more than nine hours’ drive north of Yangon, in an area decidedly lacking an ‘atmosphere of resort’. The new capital is organized, “like the *Yellow Pages*. There is an avenue for hotels and an area dedicated to restaurants. The government offices, built with traditional Burmese influences and Soviet-style bulkiness, are in one section. Housing for bureaucrats... is nearby... The city’s size is hard to judge, but it feels smaller than the government’s claim of one million inhabitants and 2,700 square miles [7,000 km<sup>2</sup>].”<sup>160</sup>

<sup>153</sup> “Still Not Free”, *The Irrawaddy*, March 2, 2010.

<sup>154</sup> Suu Kyi is the daughter of the assassinated General Aung San, whose efforts led to independence from Great Britain in 1948.

<sup>155</sup> “Voice of Myanmar”, January 27, 1992. BBC Summary of World Broadcasts. Quoted in Charney, M. W., *A History of Modern Burma*. Cambridge University Press, Cambridge, 2009, p. 176.

<sup>156</sup> <http://www.state.gov/r/pa/ei/bgn/35910.htm>, retrieved on June 22, 2010.

<sup>157</sup> <http://www.state.gov/r/pa/ei/bgn/35910.htm>, retrieved on June 22, 2010.

<sup>158</sup> The State Peace and Development Council officially changed the name of Burma to Myanmar in 1989. However, members of the democratic opposition do not recognize this name change. Out of support for the democratic opposition, the United States continues to use ‘Burma’ as the nation’s title.

<sup>159</sup> Matthew, R., “Burmese Announce Plans for a Supercity”, *The New York Times*, March 21, 1990. Quoted in: Charney, M. W., *A History of Modern Burma*. Cambridge University Press, Cambridge, 2009, p. 193.



The dawn convoy from Yangon would have followed this new road into Naypyidaw. Traditional houses in the background contrast with the paved, well-lit road.



Informal markets have sprung up to fill the void in governmental planning. This self-organization provides a strong contrast to the rest of the city's heavily controlled urban environment.



During the years of secret construction, the government hired at least 25 different Burmese construction companies to work on the new capital, including Asia World and Htoo Ltd. The Htoo Group of Companies (HGC) is a Burmese holding company with several subsidiaries, and is ultimately responsible for gross revenues of more than \$65 million, making it Burma's fifth top exporter.<sup>161</sup> The close personal relationship between Senior General Than Shwe and Htoo Ltd. CEO Tay Za may have played a role in the choice.

In 2008, the US Treasury banned Americans from doing business with Asia World Co Ltd., a Burmese company controlled by Steven Law and his father, Lo Hsing Han. The US Department of the Treasury went on to say that "Law and his father, Lo, had a history of illicit activities that supported the Burma junta. It [the US Treasury] called Lo the 'Godfather of Heroin', who has been one of the world's top traffickers of the drug since the early 1970s."<sup>162</sup> Both Htoo Ltd. and Asia World Company face economic sanctions from the United States. The sanctions, however, have proven somewhat ineffective, as Naypyidaw moves steadily towards completion.

The drive from Yangon primarily follows a two-lane road. At an unmarked intersection the road suddenly swells into an eight-lane highway and enters the city. Railroad tracks run parallel to the road before dividing the city in half and then continuing north to Mandalay. The city's hugeness is the result of its bizarre and totally inefficient organization. Along a single meandering road, crab-shaped buildings house various ministries, set back 500 m from the main road at about 700-meter intervals. Each access road leads to just one building, and civil servants must walk to the main road to catch shuttle buses or motorcycle taxis to bring them home. From the southern entrance to the city, one first passes the Home Office Ministry, followed by the Office of the Chief of Police, the Ministry of Information and the Ministry of Energy. This so-called Ministry Zone includes 31 buildings, and sets the tone for the city with its wide boulevards and Asian postmodern architecture.

The Residential Zone purports to house almost a million people in about 1,200 four-story apartment blocks, "but their cookie-cutter nature and wide spacing is closer to a soulless suburban development than the bustling city life that most residents were used to in Yangon."<sup>163</sup> In contrast to most suburban developments, however, the apartment buildings are color-coded to indicate which government workers live in which structure. The apartment blocks are organized "in true Orwellian style... Blue for health, green for agriculture and irrigation, etc."<sup>164</sup> Inside the blocks, civil servants are housed with careful attention to rank and marital status.

The Hotel Zone has eight hotels on the outskirts of the city. At the Royal Kumudra Hotel, rooms are available for almost any budget, ranging from the 743 m<sup>2</sup> Presidential Suite (a private villa) at \$500 per night, to the 43 m<sup>2</sup> Superior Room for only \$40 per night.<sup>165</sup> Other hotels in the area offer similar options, with a full range of business services, stocked mini-bars, and karaoke.

**160** "Built to Order: Myanmar's New Capital Isolates and Insulates Junta", The New York Times, June 24, 2008.

**161** Lwin, Y. and Thu, K., "Govt Dominates Foreign Trade as Gas Sales Pump Up Exports", The Myanmar Times, Volume 19, No. 369, June 4-10, 2007.

**162** Lawder, D., "US Treasury Slaps Sanctions on Asia World Co. Ltd. & ten Singapore-based Companies", Reuters, February 26, 2008.

**163** Peck, G., "Myanmar's Remote Capital Is Still a Work in Progress", The New York Times, October 5, 2007. For the full article see: <http://www.nytimes.com/2007/10/05/world/asia/05Naypyitaw.html>

**164** From Michael Hammond's editorial on the new Burmese capital: New 'Orwellian' capital built on foundations of famine and poverty. See: <http://www.worldarchitecturenews.com>, retrieved on September 19, 2008.

**165** <http://maxhotelsmyanmar.com/royalkumudra>, retrieved on June 8, 2011.

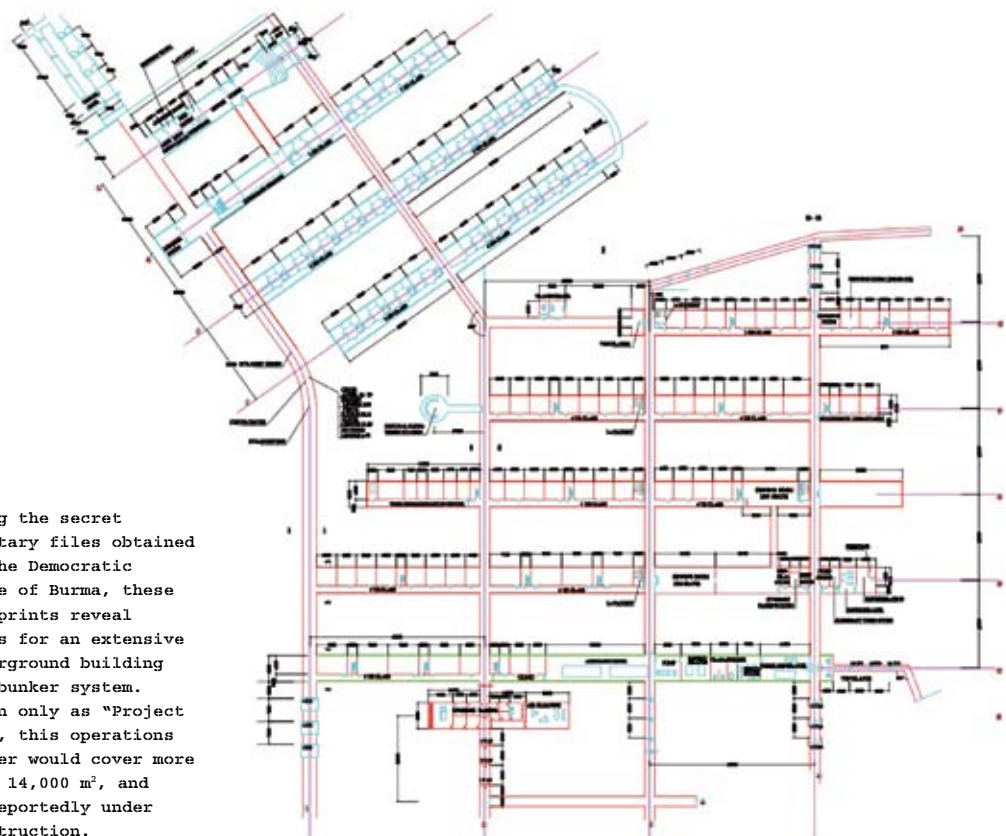


**166** Peck, G., "Myanmar's Remote Capital is still a work in Progress", *The New York Times*, October 5, 2007.

The Office Zone is organized much less densely than the residential area. An irregular grid road structure breaks the area into blocks that contain commercial and office buildings. Although there is now a shopping center, when the residents first moved in there were no schools, no shops, no grocery stores and no sources of entertainment. Inhabitants were even restricted from phoning their families in Yangon. In fact, mobile phone use in any form was outlawed until October 2009, four years after the city opened. "Many workers were unhappy when first forced to move to Naypyidaw... prices of everyday goods are high... Yangon's vibrant culture is a dim memory. To compensate, residents here get ten television stations, six more than in Yangon, although most are government channels."<sup>166</sup> Despite the social privations, recent visitors report a growing informal economy. Farmers and villagers set up market stalls outside the new mall, giving the empty paving a sense of liveliness. This self-organization contrasts with the government's strict control over almost every other aspect of life in the new capital.

### Penguins and golf

Eleven kilometers away, access to the Military Zone is prohibited to the public without written permission. This area is said to be the site of an extensive underground tunnel and bunker system, and high-ranking



Among the secret military files obtained by the Democratic Voice of Burma, these blueprints reveal plans for an extensive underground building and bunker system. Known only as "Project 216", this operations center would cover more than 14,000 m<sup>2</sup>, and is reportedly under construction.

officials live in villas guarded by limited access points. Things get more exciting here. Sources in the neighboring town of Pinyinmana say that Naypyidaw "is surrounded by dense forests and mountains, underground tunnels, bunkers, military airfields and anti-missile facilities."<sup>167</sup> Photos of the super-secret bunkers and tunnel system (built with the expertise of North Koreans) were leaked in 2009, much to the government's dismay. The pictures were dated 2003-2004, meaning that the underground New Town was actually constructed before the above-ground buildings. The true extent of this 'second city' remains a top-secret project, although blueprints of tunnel networks and command centers have trickled out through military sources.

In 2009, *TIME* magazine ran an article about the intimate relationship between Myanmar and its secretive North Korean allies. According to the authors, "North Korean engineers reportedly aided the Burmese junta in building a vast series of 600 to 800 tunnel complexes and underground facilities, particularly beneath the junta's secretive new capital of Naypyidaw... Some of these complexes have independent power supplies, built-in ventilation systems, and are reportedly large enough to allow large vehicles to drive through them. The projects have been nicknamed 'tortoise shells' by the government—the often brutally repressive regime intends to use North Korea's subterranean savvy to man a network of underground command centers, linked with fiber optic cable, that can rule Burma in times of emergency and quash any civilian uprising."<sup>168</sup> A documentary made by the Democratic Voice of Burma, a Denmark-based human rights group, aired on the Al Jazeera television network in June 2010, showing the images that had been smuggled out of the new capital. According to a Burmese major who defected to the United States, the tunnels are still under construction, and Burma's relationship with North Korea grows stronger by the day.

The sprawling, over-scaled streets of Naypyidaw are surrounded by rice paddies and farming communities. The contrast between the state-funded new city and the poverty of the indigenous people is striking. Because Number One loves to golf, "civil servants have two golf courses at their disposal, and the large zoo, which would not look out of place in Singapore or Sacramento, houses dozens of animals, including white tigers, zebras and kangaroos. On a recent afternoon, the animals greatly outnumbered the visitors. Outside the zoo's gates, farmers live in flimsy thatched huts and till rice paddies with water buffaloes. From this vantage point the zoo seems as appropriate as penguins surrounded by tropical jungle. 'This

**167** Zaw, A., "Moving Target", *The Irrawaddy*, November 9, 2005.

**168** Tharoor, I., "Why Burma May Be North Korea's Best Friend", *TIME*, June 26, 2009.



A tortoise shell bunker at neighboring Tigyit was constructed in secret under the supervision of North Korean engineers.



Military officials inspect the entrance to the underground Taunggyi command post during construction.



**169** "Built to Order: Myanmar's New Capital Isolates and Insulates Junta", The New York Times, June 24, 2008.

**170** Beech, H., "Postcard: Naypyidaw", TIME, May 22, 2008.

**171** Zaw, A., "Moving Target", The Irrawaddy, November 9, 2005.

**172** <http://www.laweekly.com/2007-06-28/news/aaron-cohen-sex-slaves-drug-trade-and-rock-n-roll/>, retrieved on June 23, 2010. Also see the PBS documentary on the Burmese heroin trade at <http://www.pbs.org/wgbh/pages/frontline/shows/heroin/>

**173** <http://www.state.gov/r/pa/ei/bgn/35910.htm>, retrieved on June 23, 2010.

**174** Any number of sources support these claims. The UN has repeatedly condemned Burma's widespread and systematic abuse of human rights. The UN passed two resolutions in November 2009, "strongly condemn[ing] the ongoing systematic violations of human rights and fundamental freedoms of the people of Myanmar [Burma]." (See [www.mm.undp.org](http://www.mm.undp.org) for more information.) Human Rights Watch and Amnesty International have also expressed concern over the junta's continued crimes. See [www.hrw.org](http://www.hrw.org) and [www.amnestyuas.org](http://www.amnestyuas.org) for more information.

**175** Pederson, R., "Burma's Agony", The Washington Post, February 19, 2009.

zoo is a government fantasy,' said a woman selling souvenirs and soft drinks near the empty ticket counter. 'Business is terrible,' she said. 'The people around here are villagers. They don't have money to spend.'"<sup>169</sup> In Naypyidaw, Number One's well-documented love of penguins comes before villagers' needs.

While it is the only area in the country that receives reliable electricity and water (blackouts are common in other cities) these benefits are considered a rather bad trade-off for many residents. The city is so unpopular that many of the civil servants forced to make the move from Yangon choose to leave their families behind. "Asked why her family stayed in the old capital, a twelve-year-old girl visiting her father answers in impressive English, 'Rangoon is better; here is bad,' earning her a slap on the head from her anxious mother."<sup>170</sup>

### Where the poppies grow

Over the past few decades, the SPDC has struggled to retain power over an increasingly unsatisfied civilian population. The country faces serious ethnic tensions, a ruined education system, a wrecked economy and a major health crisis. HIV/AIDS is rampant, with outbreaks following heroin trafficking routes through the country. According to Aung Zaw, editor of local newspaper *The Irrawaddy*, "It would be easy to write off the move to Naypyidaw as an inconsequential caprice of the secretive generals who have been in power for 46 years. But the transfer of the entire bureaucracy to this relatively remote location... has drained the country's finances and widened the gulf between the rulers and the ruled."<sup>171</sup> Junta officials can expect additional income from illegal trading and buy-offs. Benefitting from Afghanistan's internal chaos, the government-controlled drug trade now produces an estimated 1/3 of the world's heroin. 'The world's best poppy' is grown in the northeastern Shan State.<sup>172</sup> Profits from the drug trade fuel government projects after allegedly being laundered through the loosely regulated Burmese banking system. Rampant heroin addiction has also fueled the prevalence of the HIV/AIDS virus due to shared needles among users.

In the face of these pressing issues, the government has been unresponsive. In fact, according to Burmese budget data, "public health expenditure accounted for less than 1% of total government spending. High infant mortality rates and short life expectancies further highlight poor health and living conditions. Tuberculosis, diarrheal disease, malaria, and HIV/AIDS pose serious threats to the Burmese population. In 2009, the UNDP's Human Development Index, which measures achievements in terms of life expectancy, educational attainment, and adjusted real income, ranked Burma 138 out of 182 countries."<sup>173</sup> In addition to this basic neglect, Myanmar is also notorious for documented accounts of extrajudicial executions, mass graves, state-sanctioned rape, torture, child labor, forced labor, and human trafficking violations.<sup>174</sup>

In Naypyidaw, the sad story continues: infrastructure and buildings were allegedly constructed using slave labor.<sup>175</sup> Eyewitnesses claim that

many of construction workers building the new capital looked like young teenagers. When 'slave hunter' Aaron Cohen was sent to Burma in 2007 to investigate the claims of forced labor, he had no trouble finding it.<sup>176</sup> As his journal reveals, however, the Vice Minister had even more ominous stories to tell. Cohen writes: "I am advised that Burmese tradition holds an ancient legend still believed to be practiced even today in the art of human sacrifice—that every time the ruler moves the capital, four people are sacrificed at each of the four corners of the foundation of the facility. Human sacrifice is also carried out under, above and on each side of the each bridge crossing the moats corresponding to the twelve astrological signs, and the seven passages leading into the capital. 'There are 72 human sacrifices in all, preferably foreign agents,' the Vice Minister says with a twinkle in his eye. 'Yes, preferably foreign agents trying to infiltrate national security or threaten the business of the ruling party.'"<sup>177</sup> Whether or not Naypyidaw has been consecrated by human sacrifice, the country's leaders are clearly involved in dark deeds.

With the generals' increasing paranoia, the oppression of dissidents has become something of an art. According to Human Rights Watch, there are currently more than 2,100 prisoners behind bars on 'politically motivated' charges.<sup>178</sup> In a rare interview, Burmese journalist Ludu Sein Win (currently under house arrest) explained, "Yes, there are many risks for every Burmese citizen to talk to the foreigners, especially to a journalist. If you print or you broadcast our opinion we can be imprisoned at any time... I used to read *Animal Farm* and *1984*—we are just like those situations." Win agreed to the interview because he is "old and very sick; on an oxygen tank and partially paralyzed from a stroke he suffered in prison—his one hope now is that he will outlast the generals."<sup>179</sup>

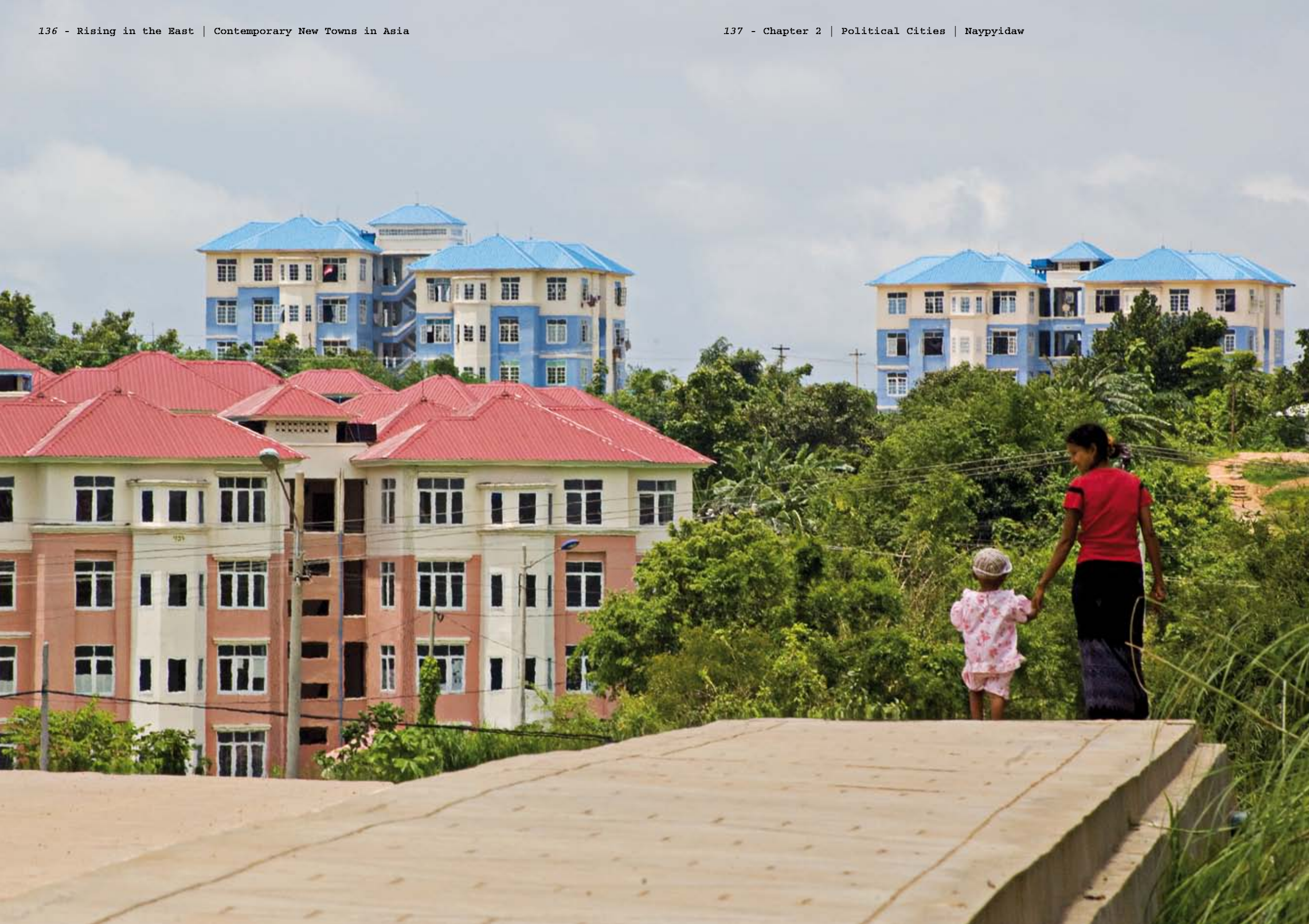
### 'Abode of kings'

Since coming to power in 1988, the junta has been almost totally dependent on foreign aid and investment. Some of the Council's first acts involved liberalizing trade and converting the British colonial remnants into a market-oriented economy. Private sector trade was opened in almost all commodities, with the notable exceptions of precious gems,



A recently completed shopping center stands almost empty (top). Burmese construction workers include women and children, 2009.









The new Burmese Parliament under construction, 2009.





Ill-equipped workers dig a ditch beside new storefronts.

**176** Buckley, C., "Aaron Cohen: Sex Slaves, Drug Trade and Rock n' Roll", *LATimes*, June 28, 2007. Read the entire article online at <http://www.laweekly.com/2007-06-28/news/aaron-cohen-sex-slaves-drug-trade-and-rock-n-roll/>

**177** Ibid.

**178** <http://www.hrw.org/en/news/2010/03/25/burma-g8-summit-should-tackle-burma-rights-crisis>, retrieved on June 23, 2010.

**179** "Inside the Secret City—Burma" Produced by SBS/Dateline. Distributed by Journeyman Pictures. Published online September 7, 2007. <http://www.youtube.com/watch?v=GGrPJVEG8M>, retrieved on June 23, 2010.

**180** Charney, M. W., *A History of Modern Burma*, Cambridge University Press, Cambridge, 2009, p. 183

**181** Mathieson, D., "Burma's authoritarian upgrade: 1990-2010", *openDemocracy*, June 10, 2010. <http://www.hrw.org/en/news/2010/06/10/>

petroleum products and teak, which remained firmly in the control of the junta.<sup>180</sup> The 'privatizations' since 1988 have created a ruling elite of extraordinarily wealthy Burmese. For example, in early 2010, "the junta began to sell off a network of government controlled gas stations, shipping ports, factories, cinemas and other assets. It is suspected such sales may in part provide a source of electioneering finance for the Tatmadaw's [Myanmar Armed Forces] friends and allies who contest the elections."<sup>181</sup> The rampant corruption within the government has also contributed to the growing gap between the very rich and the very poor. "In the years after 1988... the families of the military elite openly flaunted their wealth, drove expensive cars, loaded themselves with jewels, and took over ownership of new companies that replaced formerly state-run enterprises. As socialism gave way to consumerism, the families of the military elite visibly became Burma's *nouveau riche*, while the rest of the population continued the long slide into abject poverty."<sup>182</sup>

Some of the country's wealthiest citizens now live in villas around the new capital. Aerial photographs show sprawling houses with large pools and outbuildings. In the surrounding Mandalay district, the primary source of income is agriculture. Farmers grow rice, peanuts, sesame and cotton using methods that have remained largely unchanged since the last century. Gem mines and illegal logging are additional sources of income in the region. In fact, an editorial piece on Naypyidaw accused the junta of financing the billion-dollar construction project with trade in ruby, teak



Color-coded residential towers indicate the employment of their inhabitants. Blue-roofed buildings house Ministry of Health employees, while green roofs mean the residents work for the Ministry of Agriculture. Military officials live behind electronic gates in villas on the other side of the city.

and opium.<sup>183</sup> The capital's total cost of building remains a mystery, but Sean Turnell, an expert on the Burmese economy, claims "the consensus estimate was around \$4 billion to \$5 billion. In a country where per capita annual income is \$280—less than 80 cents a day—opposition groups say the money could have been better spent."<sup>184</sup> Funds were funneled into construction, even as the majority of Burmese nationals were still slowly recovering from 2008's Cyclone Nargis.<sup>185</sup>

In recent years, facing economic sanctions from many Western countries, the junta has been forced to find allies closer to home. Both India and China share borders with Myanmar, and rivalry between the two economic powers has benefitted the junta as both countries compete for influence. While India provides military training and weapons, as well as specialized consultancy, the PRC has been responsible for supplying most of the military gear, selling tanks and jet fighters to the safety-conscious Tatmadaw. Russia has also stepped in to gain from Myanmar's military paranoia. Since 2000, the junta has purchased MIG fighters and expertise from the Russian Atomic Energy Ministry to jump-start Burma's nuclear research program.<sup>186</sup>

In yet another example of its proclivity towards alienating Western powers, the SPDC has recently been accused of selling uranium to the Iranian government. Many observers are now worried that Burmese yellowcake (uranium concentrate in powder form) is finding its way to uranium centrifuges in Iran.<sup>187</sup> Although the actual location(s) of any

[burma-s-authoritarian-upgrade-1990-2010](http://www.burmas-authoritarian-upgrade-1990-2010), retrieved on June 23, 2010.

**182** Charney, M.W., *A History of Modern Burma*, Cambridge University Press, Cambridge, 2009, p. 171.

**183** <http://www.worldarchitecturenews.com>, retrieved on September 19, 2008.

**184** "Built to Order: Myanmar's New Capital Isolates and Insulates Junta", *The New York Times*, June 24, 2008.

**185** The cyclone caused the deaths of at least 146,000 people and damage was estimated at over \$10 million.

**186** Zaw, A., "Burma Plays Nuclear Card" *Irrawaddy Magazine*, July 2007, Volume 15, No. 7.

**187** <http://www.laweekly.com/2007-06-28/news/aaron-cohen-sex-slaves-drug-trade-and-rock-n-roll/>, retrieved on June 23, 2010.



General Than Shwe reviews a guard of honor in Naypyidaw from his specially outfitted convertible, 2009.



domestic nuclear reactors remain state secrets, some sources have suggested the forests just west of Naypyidaw as the site of both uranium resources and a nuclear reactor.<sup>188</sup> This proximity may have played a role in the government's geographical choice for the new capital. Since the military coup in 1962, Burma has been ruled by a series of inflexible juntas. In spite of multiple changes in leadership, one is struck by the lack of progress this country has made. In half a century, things have not really changed for the average Burmese family. Most citizens continue to survive from subsistence farming, plowing the land the same way their great-grandfathers did, unaffected by the capricious ruling from the central jungle hideout.

188 Ibid.

Although the move to Naypyidaw was revealing in many ways, the real message behind the move seems to be that the government is further centralizing power. The isolated jungle hideout is safe from any would-be attackers and remote enough to allow the generals to play out their paranoid scenarios unmolested. The network of tunnels and bunkers in this exceptional New Town reveal much about the terrified delusions of the junta. The color-coded apartment blocks reveal even more about how this ruling party views its citizens: as a source of labor to be cataloged and controlled. In Naypyidaw there is almost no room for originality or unplanned scenarios. There is little enough room for leisure or entertainment. The New Town is an indication of the junta's hunger for total control, an aspiration that begs the question, what happens when you remove not only freedom of speech, but a people's freedom of choice? Ready or not, the generals may soon find out.



# Astana Kazakhstan

**Location:**  
51° 10' 50.52" N, 71° 27' 39.6" E

**Client:**  
Government of Kazakhstan

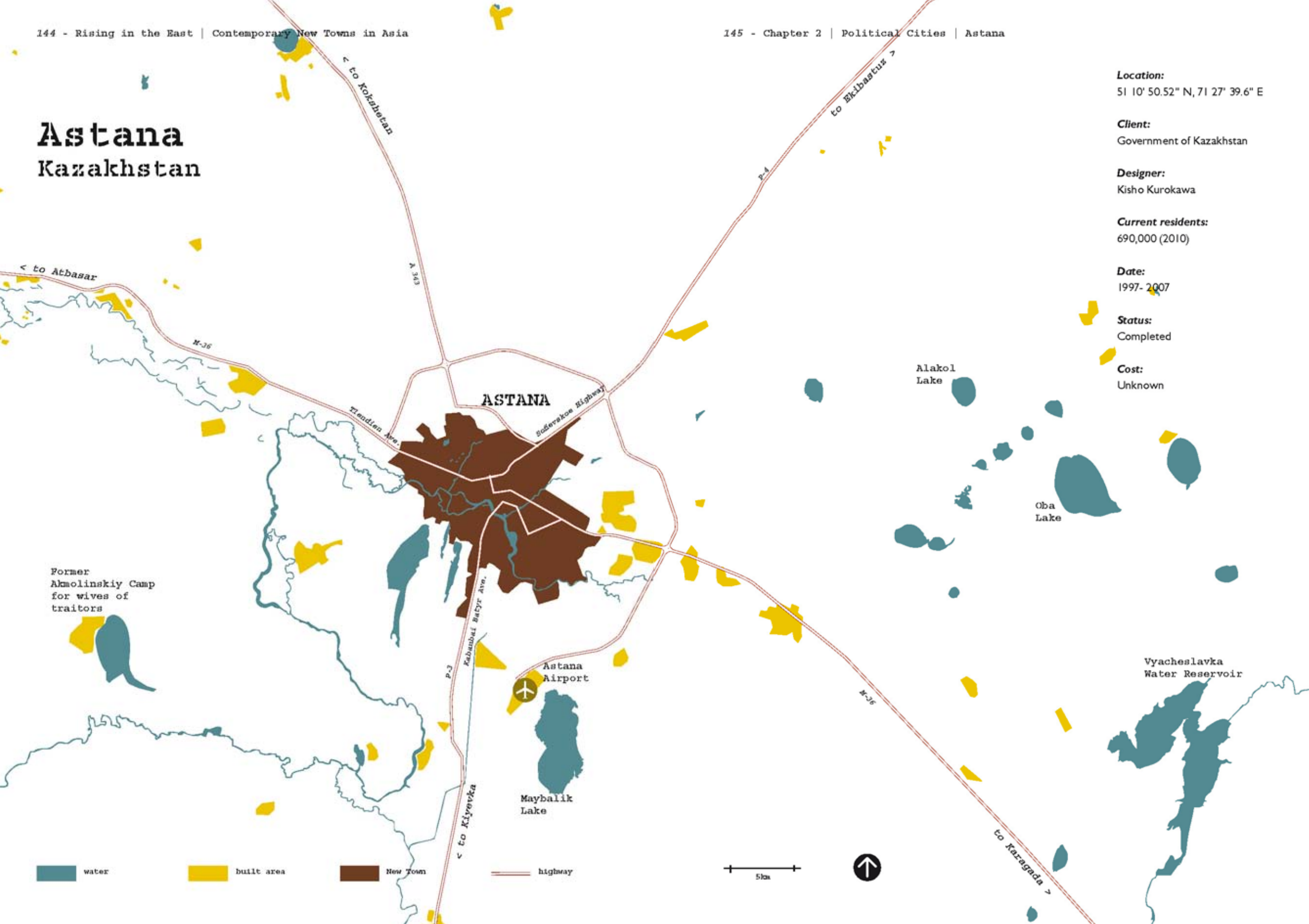
**Designer:**  
Kisho Kurokawa

**Current residents:**  
690,000 (2010)

**Date:**  
1997-2007

**Status:**  
Completed

**Cost:**  
Unknown



Former Almolinskiy Camp for wives of traitors

- water
- built area
- New Town
- highway

5km





The Palace of Peace and Accord, a perfect pyramid (62 x 62 x 62 m) by Foster + Partners, opened in 2006. A 1,500-seat opera house occupies the lower level, along with educational facilities and space specifically designed for the Congress of Leaders of World and Traditional Religions in other parts of the building.

## A capital named 'Capital'

Astana's history is one that reflects the myriad changes Kazakhstan has undergone in the last century. Even the city's name has been repeatedly reinvented. Founded by Siberian Cossacks in 1824, the city began as a village named Akmolinsk, which thrived as a merchant town until the mid-20th century. Stalin's gulag labor camps marked a dark time in the city's history, and at one point the infamous 'Akmolinskii Camp for Wives of Traitors of the Motherland' stood just outside contemporary city boundaries. Krushchev's mass grain cultivation program inspired the renaming of the city to Tselinograd, or 'Virgin Lands City' in 1961. Tselinograd stuck until 1992, when the city was renamed yet again, this time as Aqmola, or 'White Shrine' as part of the nationwide renaming program after independence from the Soviet Union.

Three years after independence, Kazakhstan's young government decided to transfer the capital 964 km north to the town of Aqmola from the southern border city of Almaty. On September 15, 1995, President Nursultan Nazarbayev (known as 'Papa' throughout the country) signed the decree 'On the Moving of the Capital'.<sup>189</sup> The city of many names was ultimately dubbed Astana (literally: 'Capital City') in late 1997.<sup>190</sup> That same year, President Nazarbayev began one of the largest and swiftest construction projects ever undertaken. In an effort to remake the city as an urban form worthy of the Kazakh capital, billions of petrodollars were poured into building and renovation projects. The reasons for the move given by the government ranged from the risk of seismic activity in Almaty to Astana's more central location—the same reasons offered by the Burmese junta in defense of the move to Naypyidaw.

The old capital of Almaty is located on Kazakhstan's southern border with Kyrgyzstan, in the foothills of the Zailiysky Alatau mountains. Almaty was the capital city from 1929 until 1997, and remains the largest city in the country, with more than one million inhabitants. The city is known today for its public gardens, parks, and green boulevards. Planned by a series of designers, (and devastated by a series of earthquakes) Almaty is organized in typical Soviet style, with a strict orthogonal grid oriented almost precisely to the cardinal points. The boulevards and grid system break up the urban fabric into 200 x 200 m blocks, similarly to Soviet colonial towns across the region.

Although the history of Almaty dates back to the Late Bronze Age, the first records of planned urban design are from the first town architect, G. N. Serebrennikov (1839-1883).<sup>191</sup> A few years later, in 1887, the city was all but destroyed by a devastating earthquake. Serebrennikov's design was later redesigned by the second town architect, French designer Paul Gurde (1846-1914). The next earthquake, in 1910, proved less destructive due to better construction regulations. In 1918, the city officially came

<sup>189</sup> Anacker, S., "Geographies of Power in Nazarbayev's Astana", *Eurasian Geography and Economics*, 2004, 45, No. 7, p. 518.

<sup>190</sup> On December 10, 1997, the President and Kazakh Parliament officially decreed the new capital. At the same time, the city was declared a Special Economic Zone in order to attract both foreign and domestic investment.

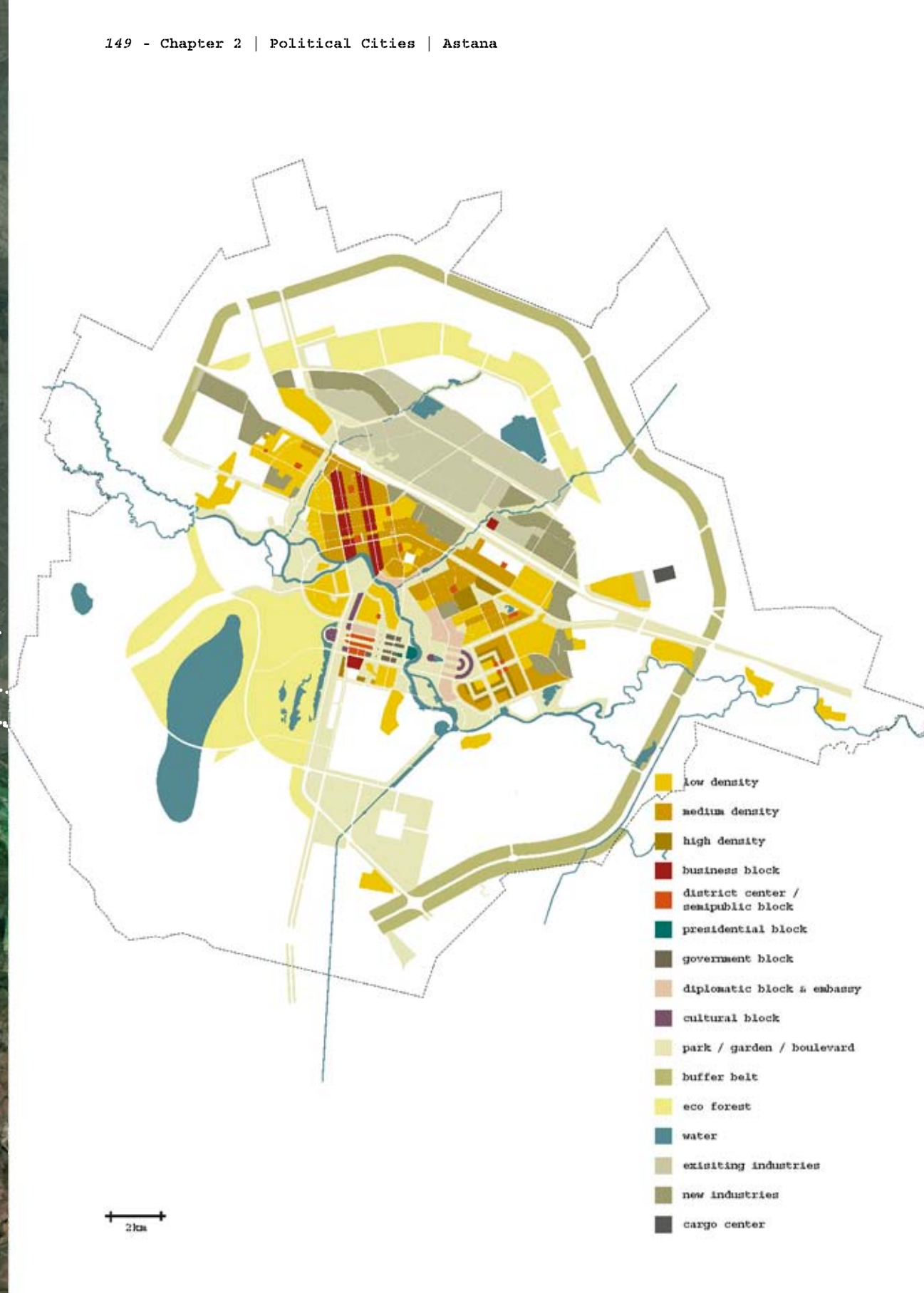
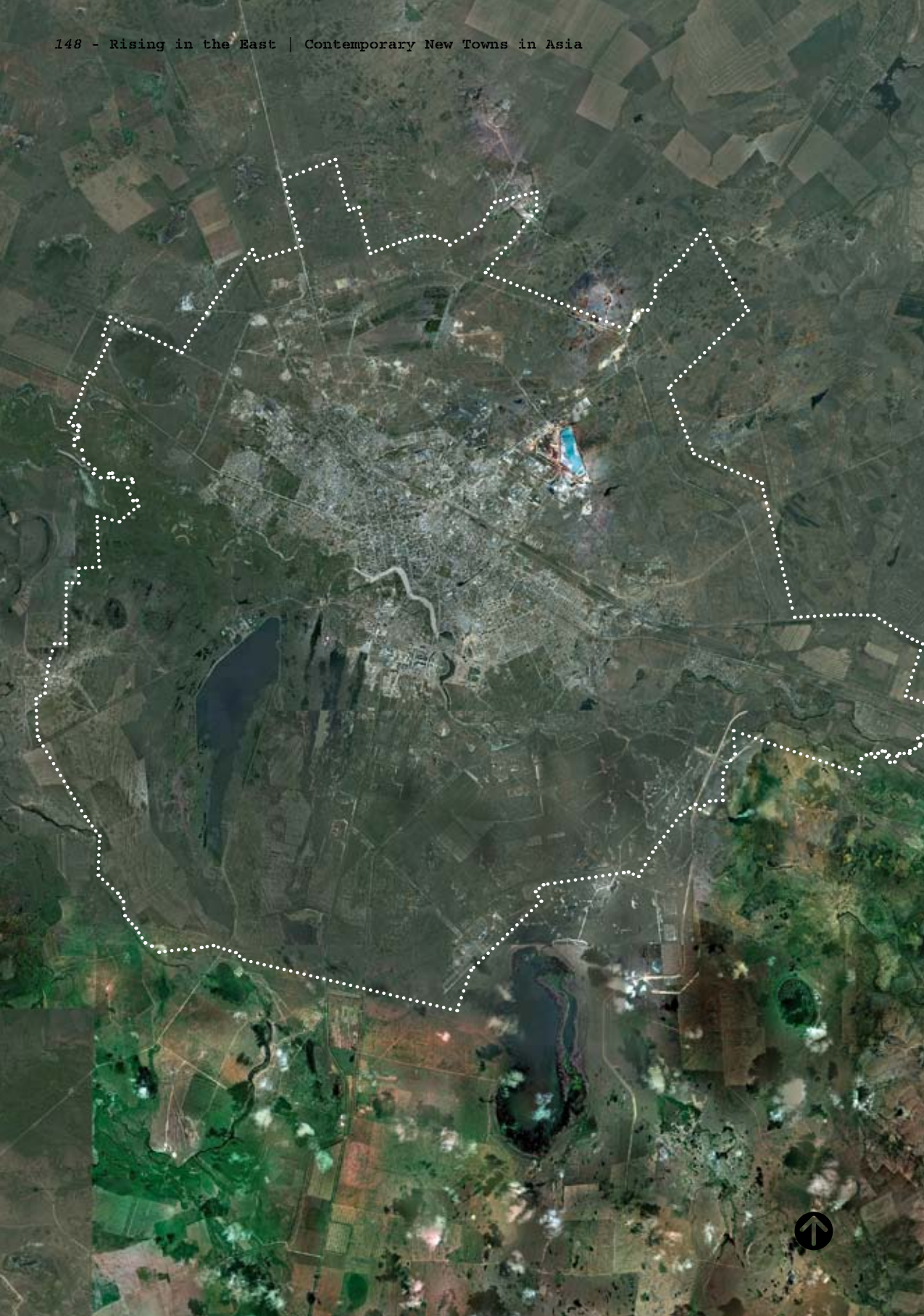
<sup>191</sup> According to the official Almaty administration website, "The first City Plan was elaborated by N. Krishtanovskiy. He offered the following parameters of the city: on the south along Almatinka was 2 km, and on the west was 3 km. He also offered to supply the city with hay, horse and green markets and lay out four parks. The new city area was divided into residential parts, and the latter into districts. Three categories of the city buildings were distinguished. Buildings



President Nazarbayev, 1993.

of the first and second categories were two-storied or, at least, one-storied constructions with the high semi-basement. Buildings of categories I and II were erected around and in the center of the city, others on the outskirts. It was quite possible to purchase land and build a house. The Gostinodvornaya square was a composition center of the city. Today, there is the Almaty center there. Main administrative and public buildings were situated around the Municipal park (today, this is the Park named after 28 Panfilof warriors)." See: <http://www.almaty.kz/page>.







php?page\_id=384&lang=2, retrieved on September 22, 2010.

**192** Takashi, Tsubokura. "Astana as the New Capital - Master Plan by a Japanese Architect KISHO KUROKAWA", December 24, 2003.

**193** Nursultan Nazarbayev quoted in Woodman, Ellis, "Palace of Peace and Accord, Kazakhstan by Foster & Partners", *Building Design*, September 22, 2006.

under Soviet jurisdiction, however, the urban plan remained largely unchanged until the 1930s. During this time the Architecture and Planning Bureau #1 of the Russian Soviet Federative Socialist Republic (RSFSR) re-evaluated the existing General Plan and chose to focus on Almaty as the new cultural and commercial capital of the Kazakh Autonomous Soviet Socialist Republic (Kazakh ASSR). The new plan worked with the existing grid structure, extending and reinforcing the rigid organization. To this day, Almaty enjoys a reputation as the cultural heart of the country due to its concentration of theatres, operas, orchestras and museums.

### Papa's power

Nursultan Nazarbayev has been president of Kazakhstan since its independence from the former Soviet Union in 1991. Since gaining power in an uncontested election, Nazarbayev has ruled the country with a politically moderate hand. Kazakhstan's government is characterized as a presidential republic, meaning that executive powers extend much further than they would in a democracy. In 2007, Parliament approved a constitutional amendment to allow Nazarbayev to be re-elected indefinitely. Oddly, this amendment only applies to Nazarbayev personally—future presidents will still be restricted to two terms in office. In 2011, 'Papa' was re-elected once again after securing a somewhat extraordinary 95.5% of the vote. Although accused of rampant corruption in domestic politics, Nazarbayev's government has maintained stable relationships with all its neighbors, and enjoyed the financial benefits of this stability.

During the years when Astana was being designed, President Nazarbayev chose to play a key role in the decision making and design process. Author Tsubokura Takashi describes Japanese masterplanner Kisho Kurokawa's response to Nazarbayev's involvement in the urban planning: "In this proposal he [Kurokawa] concentrated his attention on the president from the beginning and designed the new capital as if it were a building whose client was Nazarbayev."<sup>192</sup> Indeed, the president's intimate involvement with the design is a well-known fact. In 2006, he told Ellis Woodman, a reporter from *Building Design*, "I am the architect of Astana, and I am not ashamed to say that."<sup>193</sup> This confidence is reflected in the citizens' collective impression of the president's architectural omnipotence. In an interview with students at the local university in 2005, National Public Radio reporter Michele Kelemen recorded the following reactions to the city's opulence:

**Kelemen:** Eighteen-year-old Donna Imbrambayava grew up in Astana and remembers when it was a small, provincial, Soviet-style town, before it became Kazakhstan's capital. She likes the new style and the extravagant Tree of Life [Bayterek Tower].

**Ms. Imbrambayava:** It's a symbol of us, of a new Astana, of our capital; symbol of...

**Unidentified Man:** Nazarbayev.



Typical Astana housing blocks with a community playground show the Soviet history of the city.

**Ms. Imbrambayava:** ...our...

**Unidentified Woman #1:** Future.

**Unidentified Woman #2:** Nazarbayev.<sup>194</sup>

Although the president's Nur Otan party has been in power since 1991, the president's time in office has been marred by consistent accusations of corruption, nepotism and human rights violations. Since 2006, the president's influence has stretched deep into the oil and gas industry. In 2006, state-owned KazMunaiGaz (KMG) announced Timur Kulibayev's promotion to chairman of the board of directors for KMG.<sup>195</sup> Kulibayev's wife is President Nazarbayev's second daughter, Dinara. Many saw the promotion as an indication of nepotism, or at the very least, a clear conflict of interests. In an interview from 2007, former ambassador and political analyst Bolatkhon Taizhan was quoted as saying, "Nazarbayev seems to have managed to get the major sector of the national economy directly into his own hands through the appointment of his son-in-law to that position. Of course, even before [his son-in-law's appointment], all the sectors were under President Nazarbayev's control. But now—and I have to repeat this—the appointment of his son-in-law to that position means direct control of the [petroleum] sector for Nazarbayev."<sup>196</sup> The Nazarbayev family's reach extends throughout Kazakh media, state banks and Parliament. Their collective influence transcends the tangled web of Kazakh public and private sectors.

In June 2010, the American watchdog organization Freedomhouse published a report claiming that "corruption [in Kazakhstan] is widespread at all levels. The US Justice Department continues to investigate alleged bribes by US oil companies to secure lucrative Kazakh contracts in the 1990s. Rakhat Aliyev's 2008 allegations of high-level corruption were accompanied by some documentary evidence and matched reports from numerous other sources. Kazakhstan was ranked 120 out of 180 countries

**194** From the interview Kazak Capital Astana: Progress Amid Isolation by Michele Kelemen, for National Public Radio, first published on October 24, 2005. The transcript is available online at <http://www.npr.org/templates/story/story.php?storyId=4972497>, retrieved on June 15, 2010.

**195** KazMunaiGaz (KMG) is a state-owned national oil company. KMG was created in February 2002 from a merger between KazakhOil and TransNefteGaz.

**196** <http://www.allbusiness.com/agriculture-forestry-fishing-hunting/support-activities/3890024-1.html>, retrieved on September 7, 2010.



**197** [http://www.eurasia.org.ru/en/index.php?option=com\\_content&view=article&id=420:2010-06-03-145903&catid=4:events-and-opinions&Itemid=6](http://www.eurasia.org.ru/en/index.php?option=com_content&view=article&id=420:2010-06-03-145903&catid=4:events-and-opinions&Itemid=6), retrieved on September 7, 2010.

**198** The political ramifications of the move extend from Nazarbayev's uncontested control to the deliberate spread of wealth throughout the country. In 2010, the city became the home of the rotating chairmanship for the Organization for Security and Co-operation in Europe, (OSCE) thus expanding regional influence and prestige.

**199** Anacker, S., "Geographies of Power in Nazerbayev's Astana", *Eurasian Geography and Economics*, 2004, 45, No. 7, p. 518. Anacker quotes the following articles in defence of his claim: "For example, *Kazakhstanskaya Pravda*, January 22, 1998, questioned, "Why go out into the barren steppe, where there are neither roads nor power grids? Why waste resources trying to irrigate such weak soil? Why construct canals and buildings in a totally New Town, when in the old capital the streets are still not sufficient?" (as reprinted in Rubstev and Popov, 1998, p. 16; see also *Panorama*, February 13, 1998, p. 24 and *Nezavisimaya gazeta*, April 28, 1998, p. 25).

**200** <http://www.slate.com/id/2096026/>, retrieved on September 7, 2010.

**201** *Novii Kazakh*, the country's nouveau riche, jet down to Almaty to party on the weekends. Monday morning it's back to business in windswept Astana.

**202** Schatz, E., "What Capital Cities Say About State and Nation Building", in: *Nationalism and Ethnic Politics*, Vol. 9, Issue 4, 2004, p. 112.

surveyed in Transparency International's 2009 Corruption Perceptions Index.<sup>197</sup> While the Kazakh constitution provides for freedom of the press, investigative journalism is greatly hampered by laws making libel a criminal offence (and thus contributing to self-censorship in the press), the government's tendency to block websites that criticize the ruling party, politically motivated arrests and the government's general harassment of other media outlets.

But in a region where many former Soviet states are still struggling to boost their economies, Kazakhstan's citizens are likely to forgive their president for a bit of political intrigue. The changes for which he is considered responsible have shaped the country into a swiftly developing state. One of those changes, of course, was the move from Almaty to Astana.<sup>198</sup> In many ways, the president is responsible for Astana's very existence. When President Nazarbayev announced the capital's relocation to the central plains, there was public outcry at the perceived waste of resources. As author Shonin Anacker writes, "If there was one fact that all citizens of Kazakhstan could agree upon, it was that Aqmola, as it stood in 1995, was a totally inappropriate site for the capital of a modern state. Most saw this industrial city of roughly 200,000 inhabitants as a remote place with a deteriorating infrastructure and a lack of obvious historical or cultural significance. Editorials decrying the provinciality of Aqmola were common."<sup>199</sup>

The country's newfound affluence has done much to assuage public resistance, but as journalist Kim Iskyan points out, "Turkish grocery stores and the renaming of Aqmola—which in Kazakh means either 'white tombstone' or 'white sacred place', depending who you talk to—to Astana can't change the city's major drawback: its inhospitable weather. Winters on the windswept Siberian steppes are brutally cold, while steamy summers are characterized by swarms of baseball-sized mosquitoes. The move from cosmopolitan and comparatively temperate Almaty has been highly unpopular."<sup>200</sup>

Despite the grumbles, most observers now credit Nazarbayev for the move as an act that was critical to the unification of the giant country. In the years following the move, the northern half of the country has benefited financially from the more central location. Almaty has been able to revamp its own identity as a cosmopolitan hub and Astana continues to solidify its reputation as the country's administrative and business center.<sup>201</sup>

Author Edward Schatz argues that capital relocation is an attractive strategy for post-colonial states because it allows young nations to create new political identities and cultural geographies.<sup>202</sup> In Astana's case, this theory holds true. With all the former Soviet street names and buildings dutifully replaced (or covered over), Kazakhstan's new identity is a carefully crafted image of affluence and architectural icons, financed by the country's large oil and gas reserves.

## Metabolic city

Rising out of the central Asian steppe, Astana is a hodgepodge of 1990s postmodern and Soviet-classical architecture. Beyond the ring road, inscribing a 24 km diameter around the city, the Kazakh grasslands stretch endlessly, providing a muted backdrop for the colorful city.<sup>203</sup> In 1998, the government kicked off the grand reconstruction project by inviting no less than 50 internationally renowned architects and city planners to participate in a competition for the masterplan and design of the new capital city. Twenty-seven teams submitted their designs to be evaluated by the jury. That jury, including President Nazarbayev, awarded Japanese architect Kisho Kurokawa first prize on October 6, 1998.

Incorporating ideas from the Metabolist movement, Kurokawa designed his plan for Astana as a 'Metabolic City'—a city that would grow and change over time, adapting to shifting circumstances. Kurokawa's system would "analyze and review the situation every five years, and modify the plan in a flexible way."<sup>204</sup> Thus the plan was intended as an adaptive system, leaving room for growth and dialogue. While the existing city of Aqmola had a population of only 200,000, Kurokawa's plan was designed to accommodate an additional 700,000 by the year 2030. As of March 2010, Astana's population had already reached 691,529.<sup>205</sup>

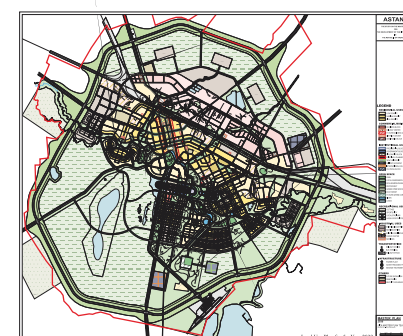
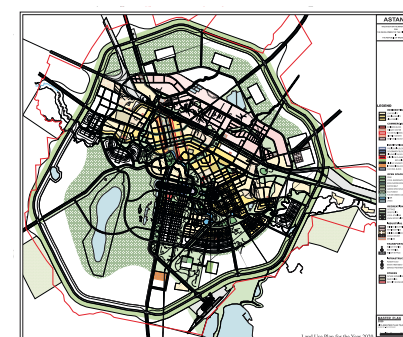
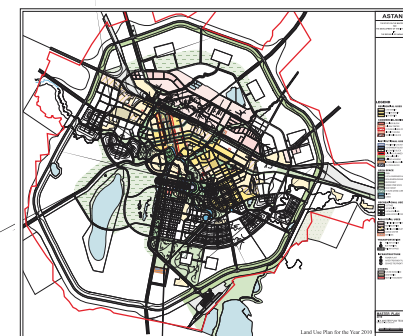
The architect proposed a preservation and redevelopment approach for the old city north of the Ishim River. To the south and east, Kurokawa suggested plans for a new city, enabling what he termed 'the Symbiosis of the History and the Future'—an idea that held great appeal for the fledgling nation. His designs included extremely simplified geometric forms which would reference historical Kazakh symbols.<sup>206</sup> However, Kurokawa's detailed Metabolic plan was eventually forced to find symbiosis with two other plans. Even after the Japanese government agreed to grant funds to Kazakhstan to construct the new city, the Kazakh government approved *another* masterplan, this one by the Saudi Bin Ladin Group. For a number of years, Kurokawa was forced to work with this design, merging ideas from the two masterplans. In 2001, after months of confusion on the sprawling construction site, the Kazakh government finally cancelled the Saudi Bin Ladin Group's proposal and moved forward with just Kurokawa. In 2004, Kurokawa revised the plan again.

The project has since been reinterpreted by a growing number of protagonists. Perhaps most notably by Astana's city architect, Shokan Mataybekov, and President Nazarbayev himself. An article from June 2010 illustrates the extent of the ongoing process: "On the wall behind him [Mataybekov] is a framed plan of the city. He has added overlays as the plan gets revised. The overlays have now left the confines of the frame and are marching down the wall."<sup>207</sup> And yet, despite the city's potpourri of influences, some major aspects from Kurokawa's plans have survived. In an effort to maintain the architect's original proposal for a ring of green around the city, "tree-planting on

**203** Situated in this vast rural context, Astana is also one of the world's coldest capital cities. Winter temperatures can dip below -40°C and foreign embassies regularly regard the city as one of the highest 'hardship' posts available.

**204** Statement from Kisho Kurokawa's office regarding the Astana masterplan, April 2010.

**205** This number comes from the Statistical Service of Kazakhstan, with



Kisho Kurokawa's metabolic plan for Astana shows an evolution and densification over time from 2010 (top) to 2020 (middle) to 2030 (bottom).





The variations in density within Astana's city limits are striking. Single family villas stand next to high-rise towers; wide streets and open lots add to the strange organization.



A view of the Ishim River looking south towards the Presidential Palace (Ak Orda). New housing projects and parks line the riverfront.





numbers valid as of March 1, 2010.

**206** This idea has since been reiterated by Foster + Partners, perhaps most obviously in the pyramidal Palace of Peace and Accord.

**207** <http://www.bdonline.co.uk/steppe-on-it/3074115.article>, retrieved on June 15, 2010.

**208** Ibid.



An undated photograph of Aqmola (before it became Astana) shows wide roads and low-rise buildings, ca. 1900.



The golden towers house government offices, while the blue-domed Presidential Palace (Ak Orda) sits at the end of the main governmental axis, 2010.

the windy, dusty steppe has been a key part of the whole exercise. From the southwest, source of the prevailing winds, a green quadrant of hardy Canadian trees and native Asian species penetrates the circular plan almost to the centre.”<sup>208</sup>

From a distance, the basic shape of the city holds true to the rounded form imagined by Kurokawa. Another remnant of the Metabolist plan is the programmatic division of spaces. The majority of the Old Town residential areas are sandwiched between the Ishim River to the south, and a massive bundle of train tracks to the north. The tracks cut through the city on their way across the country. North of these tracks, industrial areas cover a huge swath of land before terminating suddenly at the A343. Sofievskoe Highway, one of the city’s main arteries, runs through the industrial terrain, heading north out of town.

The city is divided into three administrative districts: Almaty District, on the northern bank of the Ishim, comprises mainly the Old Town and new industry; Esil District, on the south bank, serves as the commercial and governmental hub; Saryarka District (east of Almaty District), includes part of the Old Town as well as new residential, industrial and commercial enterprises. Subdivided among these three administrative districts are ten Market Zones. The Industrial Zone covers the area at the northern edge of the city, extending more than 15 km across the city’s northern periphery. It is considerably larger than any of the other zones, and dominated by industrial landscape. Riverside is one of the city’s smallest districts, with mostly upper-class residential projects and some small businesses. Old Center is just north of Riverside, and still acts as the commercial heart of the Old Town. This district is characterized by a mixed-use program of retail, office buildings and residential developments. The Extended Old Center wraps around the northern perimeter of the Old Center, acting as a sort of buffer zone between the dense city center and the heavy industry further north. This area

is mainly populated by three- to five-story housing blocks from the 1950s and 1960s. Slightly more modern residential areas from the 1970s and 1980s characterize the Microdistricts Zone, just east of the Extended Old Center. Moving further east, South-East zone is home to primarily new housing, organized along strictly gridded streets. These houses are typically larger, with front and back yards walled in by concrete-block fences. Ak-bulak, Energetic and Chubary are all purely residential zones, occupying the geographical center of the city. Most of the housing is new construction, but some residences remain from previous eras. On the city’s western flank, Karaotkel Zone is predominately filled with newly-built individual houses.



Astana women walk along the fashionable new Ishim riverfront.

Zarechny Zone is also known as Government City, and is Astana’s ode to Beaux-Arts urban planning. Kurokawa’s original plans for the city placed the central government and cultural facilities almost in the center of the city, on the south side of the Ishim River. The governmental buildings align with a park-like concourse that acts as a structuring element for the city. Although this zone has been built almost exactly as planned, the surrounding residential and commercial areas envisioned by the planner have not yet materialized, leaving ‘Government City’ un-insulated at the southernmost edge of the city.

The western origin of Government City’s theatrical axis is identified by Foster + Partner’s much-published Khan Shatir Entertainment Center.<sup>209</sup> Foster’s tent-like structure is the largest tensile construction in the world. Opened on July 5, 2010, the Khan Shatir shelters more than 100,000 m<sup>2</sup> of indoor recreation space. In Astana’s inhospitable climate, inhabitants will be able to spend winters under the 150-meter-high cable-net structure enjoying cafes, restaurants, shops, cinemas and other leisure activities.

Moving east along the axis, the Ministry of Power and Mineral Resources act as a giant gateway, soaring over the pedestrian path and dramatically attesting to the importance of natural resources in this energy-rich country. Along both sides of the manicured ‘green boulevard’ towers flank the park-like procession. Flowers, sculptures and fountains lend a human dimension to the otherwise colossal scale of the district. At the end of the park, the Bayterek Tower soars 97 m high. This torch-like building is

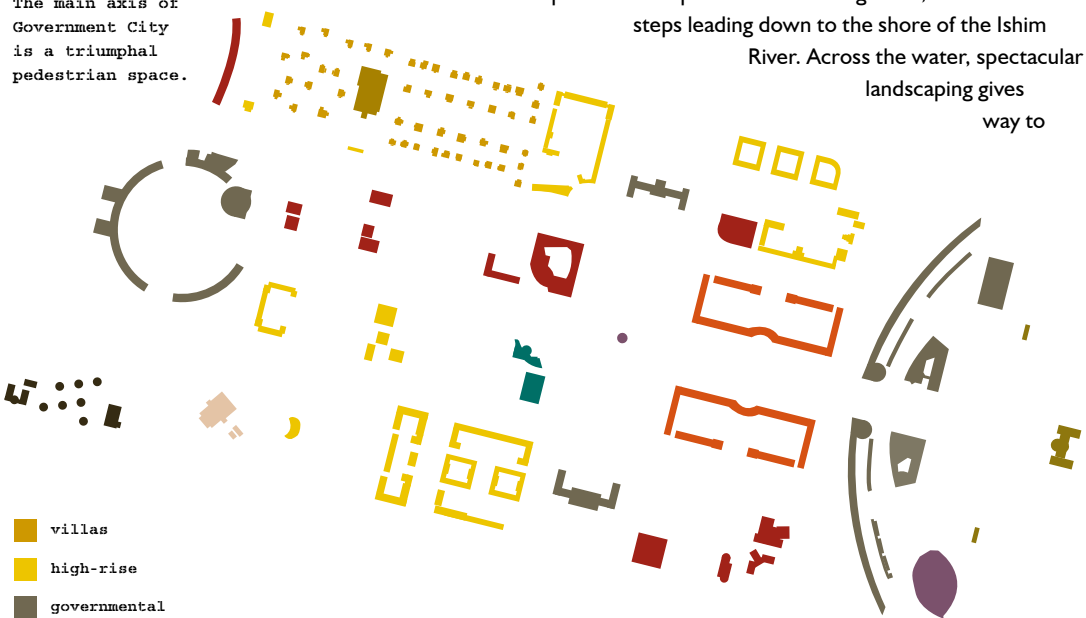
**209** The Khan Shatyr Entertainment Center is Foster’s latest project in Astana: the soaring tent structure (sheltering a shopping complex and indoor beach) is intended to provide a comfortable environment for citizens to use during the six months of below-freezing weather (-30 °C). “The building will have 100,000sq m of interior space comprising 40,000sq m retail, 18,500sq m leisure and sports facilities, 21,000sq m car parking and 20,500sq m back-of-house services—all enclosed beneath a vast cable net structure and 19,000sq m of ETFE foil cushions.” See: <http://www.bdonline.co.uk/buildings/technical/foster-and-partners%E2%80%99-khan-shatyr-entertainment-centre/3137959>, article, retrieved on June 15, 2010. The tent will provide a terminus for Astana’s main axis. At the other end of the axis, across the Ishim River, Foster and Partner’s Pyramid of Peace and Accord anchors the classical organization.



widely considered the symbol for the city. Tourists and citizens alike head to the cafe at the top of the rotating golden orb. Young and old reverently place their hands in a golden imprint of President Nazarbayev's own palm, hoping to benefit from some of the president's seemingly endless luck.

Continuing east, two golden towers flank the green boulevard as it passes under the massive crescent-shaped Ministries House. The Presidential Palace, also known as Ak Orda, rises in the foreground: 36,000 m<sup>2</sup> of perfect symmetry swathed in gold leaf and Italian marble, with a golden shaft rising out of the Palace's bright blue dome. The Palace sits at the midpoint of a sculpted semi-circular garden, with terraced steps leading down to the shore of the Ishim River. Across the water, spectacular landscaping gives way to

The main axis of Government City is a triumphal pedestrian space.



- villas
- high-rise
- governmental
- library
- hospital
- cultural
- presidential palace
- hotel
- offices
- mixed use
- mosque

Foster + Partners' other iconic building: the pyramidal Palace of Peace and Reconciliation. The 65-meter-high structure symbolizes Astana's commitment to diversity and religious tolerance. The pyramid rises above four sunken entry points oriented just slightly off of the cardinal points, and dominates the flat landscape extending behind it, providing a strong terminus for the visual axis.

The city's somewhat fickle relationship with the Kurokawa plan has left it open to a lot of haphazard construction, exacerbated by the ebb and flow of the oil market. The result, however, may be more in line with the Metabolist plan than one realizes. After all, one of the key tenants of Metabolist planning is openness to organic change. If anything, Astana has embraced this approach to its physical appearance by repeatedly adding eye-catching buildings as soon political and financial limitations allow. As it continues to expand, the capital experiences constant reinvention: though it doesn't *look* like the future painstakingly imagined by the Japanese planning team, Astana's ongoing evolution is surely in line with Metabolist ideals.



The Bayterek Tower in the middle of the main axis.

### Made possible by..

Although the capital's final price tag remains unconfirmed (estimates begin at \$400 million), it is clear that the city's growth has been financed largely by the oil and gas sector. Since 2000, the country has experienced rapid development in direct relation to this industry. In fact, in the early 1990s, the true boost that made Astana possible was foreign investment in the newly opened energy sector. The country is now the second-largest producer of crude oil (after Russia) of all the former Soviet states, with approximately eight billion tons of proven recoverable oil reserves.<sup>210</sup> According to the US Energy Information Administration, "Full development of its major oilfields could make Kazakhstan one of the world's top five oil producers in the next decade."<sup>211</sup> Kazakhstan is also a net exporter of natural gas, coal and uranium.

This production has fueled a steady GDP growth averaging around 9% from 2000 until 2007. The global financial crisis of 2008-2009 forced government bailouts of four major banks, and dramatically drove down real estate prices. Since peaking in spring 2007, city-wide real estate prices have fallen by 58%.<sup>212</sup> Today, a two-bedroom apartment (128 m<sup>2</sup>) on Astana's posh Left Bank sells for about \$300,000—a real steal considering the prices of just five years ago.<sup>213</sup>

As Astana struggles to emerge from the crisis, it continues to be a major attraction for many Kazakhs. Outside of the energy sector, agriculture makes up 10% of the country's economy, and migrants from the sparsely populated farmlands are drawn to the perceived opportunities the city has to offer. In Astana, this has manifested itself as a 49% population increase

<sup>210</sup> [http://www.kmgep.kz/eng/kazakhstan/kazakhstan\\_key\\_facts/](http://www.kmgep.kz/eng/kazakhstan/kazakhstan_key_facts/), retrieved on September 8, 2010.

<sup>211</sup> <http://www.eia.doe.gov/cabs/Kazakhstan/Background.html>, retrieved on September 8, 2010.

<sup>212</sup> <http://silkroadintelligencer.com/2009/10/22/residential-real-estate-good-days-in-kazakhstan-still-another-2-3-years-off/>, retrieved on September 8, 2010.

<sup>213</sup> <http://www.4321.co.il/property/property.asp?p=78411&name=kazakhstan>, retrieved on September 8, 2010.



**214** <http://www.euromonitor.com/factfile.aspx?country=KK>, retrieved on September 8, 2010.

**215** <http://www.state.gov/g/drl/rls/irf/2009/127366.htm>, retrieved on September 7, 2010.

**216** HRW reports that Philip Morris International (a company with a monopoly on the tobacco purchased from Kazakhstan) has since implemented changes in an effort to reduce the exploitation of migrant workers on tobacco farms. HRW's deputy director for Europe and Central Asia, Rachel Denber, explained that the abuses are compounded by tobacco workers' volume-based compensation. "The payment structure is such that migrant workers get paid once at the end of the season by the volume of tobacco that they produce," she notes. "And that incentivizes child labor because these migrant workers travel with families and they need to get as many hands on the tobacco as possible." For more on this story, see: [http://www.rferl.org/content/Exploited\\_Tobacco\\_Workers\\_Child\\_Laborers\\_In\\_Kazakhstan\\_2101903.html](http://www.rferl.org/content/Exploited_Tobacco_Workers_Child_Laborers_In_Kazakhstan_2101903.html), retrieved on September 7, 2010.

**217** Activist Vadim Kuramshi was researching an increasing number of self-mutilations in Kazakh prisons, allegedly as acts of protest against prisoner abuse and objectionable living conditions. Read the full article on Radio Free Europe Radio Liberty: [http://www.rferl.org/content/Kazakh\\_Rights\\_Defender\\_Jailed/2141322.html](http://www.rferl.org/content/Kazakh_Rights_Defender_Jailed/2141322.html), retrieved on September 7, 2010.

**218** [http://www.eurasia.org.ru/en/index.php?option=com\\_content&view=article&id=420:2010-06-03-145903&catid=4:events-and-opinions&Itemid=6](http://www.eurasia.org.ru/en/index.php?option=com_content&view=article&id=420:2010-06-03-145903&catid=4:events-and-opinions&Itemid=6), retrieved on September 7, 2010.

**219** [http://www.eurasia.org.ru/en/index.php?option=com\\_content&view=article&id=420:2010-06-03-145903&catid=4:events-and-opinions&Itemid=6](http://www.eurasia.org.ru/en/index.php?option=com_content&view=article&id=420:2010-06-03-145903&catid=4:events-and-opinions&Itemid=6), retrieved on September 7, 2010.

between 2004 and 2009.<sup>214</sup> With a continuing influx of people, Astana's construction industry will have no shortage of projects in the years to come.

## Corruption in the capital

Kazakhstan's post-Soviet history has been a continuous battle for unity in a country populated by ethnic Kazakhs, Russians, Uzbeks, Uyghurs, Tatars, Germans and Ukrainians. The nation's demographic diversity is a direct result of both Kazakhstan's central location and its historical use as a dumping ground for Soviet opposition and minorities. This variety is also reflected in the country's religious split between Muslims, (65%) and Russian Orthodox (33%).<sup>215</sup> Perhaps most tellingly, only half of the country's inhabitants even speak Kazakh; everyday business is conducted in Russian. Recently, the issue has become somewhat contentious, with ethnic Kazakhs pushing for more language education and increased usage in the public sector.

The ethnic diversity has been used as a tool to claim legitimacy for a strong hand in domestic politics, with many government insiders supporting Nazarbayev's creeping monopoly on power as a necessary 'firm hand'. Human rights groups, however, have repeatedly criticized the government's questionable record. In late 2009, the New York-based Human Rights Watch (HRW) revealed the results of a fact-finding mission, claiming that hundreds of thousands of migrant tobacco workers in the country's vast farmlands "essentially have no rights".<sup>216</sup> In another example of political bullying, a human rights activist who had drawn public attention to the state of Kazakh prisons was sentenced to ten days in jail in August 2010 for 'hooliganism'. Colleagues claimed that his imprisonment was politically motivated.<sup>217</sup> While the Kazakh constitution guarantees freedom of worship, some religions experience state-sanctioned discrimination. In 2005, a series of laws were passed that gave the government the ability to outlaw any organizations it termed 'extremist' and banned all activities by religious groups who failed to register. Since then, "local officials have harassed groups defined as 'nontraditional,' such as Hare Krishnas, Baptists, and Jehovah's Witnesses. In 2009, a Hare Krishna community in Almaty charged that the authorities had destroyed 26 homes belonging to its members."<sup>218</sup>

Despite the country's economic advancement and stable international record, Kazakhstan has consistently ranked as one of the most corrupt countries in the world. Transparency International's Corruption Perception Index 2009 ranked Kazakhstan 120th, tied with Bolivia and Ethiopia. In June 2010, Freedomhouse classified the republic as 'Not Free', citing "politically motivated libel suits against critical media outlets, a restrictive new Internet law, arbitrary arrests of officials and business-people, and the grossly deficient judicial proceedings against human rights activist Yevgeny Zhovtis."<sup>219</sup> According to some sources, corruption is so widespread that even students financially reimburse their professors for good grades.

## Our favorite Kazakhstan

Because Astana is one of the older New Towns examined in this book, and also due to its more piecemeal development, the city has not faced the lack of leisure and employment options that plague most New Towns. Astana is considered successful by many of its inhabitants, particularly when compared to neighboring states that have struggled towards modernization since independence. In his national address to the country on the capital's tenth anniversary, President Nazarbayev summarized his personal feelings in the following way:

"Dear friends!

New light and noble capital became for our Fatherland realization of new future of our favorite Kazakhstan. Here on the ancient ground Sary Arka the capital was born not for nothing and became a cradle of the future of the country. The history of Astana and destiny of Kazakhstani people are inseparable from each other. If in our history there was no Astana, our Kazakhstan would not become such what it is today. Independence has generated Astana, in turn Astana confirms and develops our Independence. Astana became bright, strong, prospering, city going forward and uniting all Kazakh people. Astana became heart of our Native land, the national idea which has united people, it became a creed of people in the forces and great applicability... It is city, in which every day house warming, every day a holiday, weddings... new settlers, new families and new fates. Friendship of people, mutual understanding and solidarity is the basis on which we build Astana and new Kazakhstan!

President of Republic of Kazakhstan Nursultan Nazarbayev<sup>220</sup>

The president's sentiments are widely echoed by a population pleased with the economic and political stability brought about in the last decade. As the young generation enthusiastically proclaims, the city is a place where you can work hard and the money will follow. For many, that is attraction enough.

**220** [http://www.astana10.com/page.php?page\\_id=776&lang=3&article\\_id=1241](http://www.astana10.com/page.php?page_id=776&lang=3&article_id=1241), retrieved on September 8, 2010.



The Khan Shatyr is a 150 m high tent structure designed by Foster + Partners in 2006. The transparent 'skin' covers 140,000 m<sup>2</sup> of shopping and entertainment facilities, including an indoor beach resort.

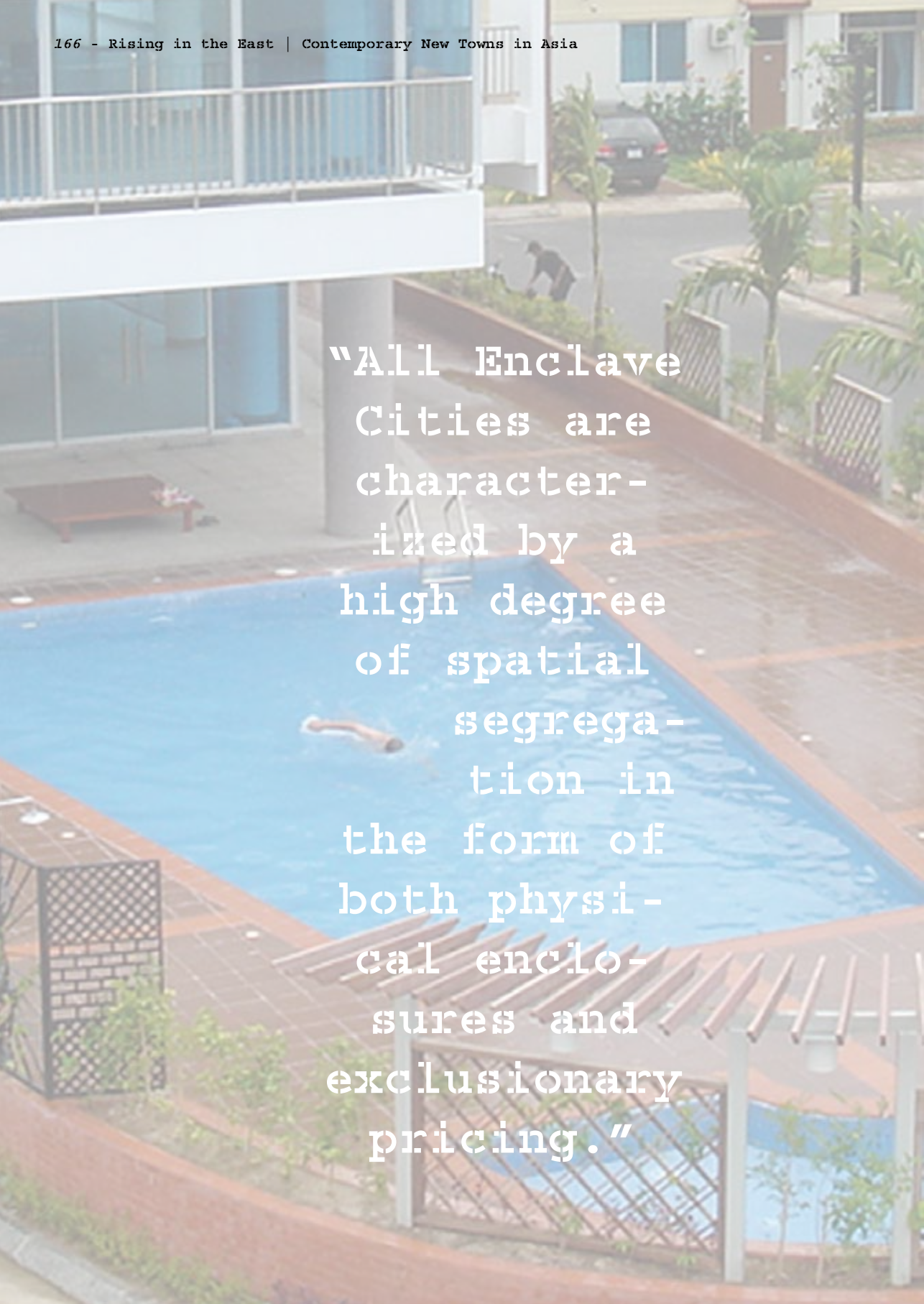


The golden dome gleams atop the City Mosque of Astana (Nur Astana). The Islamic Center was built in 2005 with contributions from the Emir of Qatar.









“All Enclave Cities are characterized by a high degree of spatial segregation in the form of both physical enclosures and exclusionary pricing.”

### Chapter 3: Enclave Cities: To Withdraw Like a Monk and Live Like a Prince

Since the origin of the city, those with the means to remove themselves from the chaos of the urban centre have been more than ready to find alternative quarters. The migratory phenomenon—the search for that elusive ‘peace and quiet’—parallels the long history of the city itself. In his seminal *History of the City*, Louis Mumford describes the attractions of the Victorian suburbs: “To be your own unique self; to build your unique house, mid a unique landscape; to live in this Domain of Arnheim a self-centered life, in which private fantasy and caprice would have license to express themselves openly, in short, to withdraw like a monk and live like a prince—this was the purpose of the original creators of the suburb.”<sup>221</sup> Similar intentions have informed the construction of New Towns since Ebenezer Howard’s Garden City. The new Enclave Cities are no different: they are manifestations of the desire not only to live within a community of one’s social peers, but to escape the unsightly realities of urban life. Just as it did in the 19th century, “the menace of poverty” continues to add “a further incentive to the exodus.”<sup>222</sup> The desires of the upper and middle classes are strikingly the same around the globe: safety, privacy and space. The current generation of Enclave Cities is merely an extension of these somewhat basic aspirations. Where once distance and social class was enough to ensure privacy, now password-encrypted gates and closed-circuit security systems insulate the latest generation of Enclave Cities.

<sup>221</sup> Mumford’s description of the Victorian suburb could easily be mistaken for an analysis of the new Resort Cities spreading across Southeast Asia and the Middle East: “By the very nature of the retreat, the suburb could be identified by a number of related social characteristics. And first, it was a segregated community, set apart from the city, not merely by space, but by class stratification: a sort of green ghetto dedicated to the elite... Thus the suburb served as an asylum for the preservation of illusion... This was not merely a child-centered environment: it was based on childish view of the world, in which reality was sacrificed to the pleasure principle... Thus in reacting against the disadvantages of the crowded city, the suburb itself became an over-specialized community, more and more committed to relaxation and play as ends in themselves.” Mumford, L., *The City in History: Its Origins, Its Transformations, and Its Prospects*, Harcourt Inc., Orlando, 1961, pp. 485-486 and 493-495.

<sup>222</sup> Op. cit., p. 488.



**223** As we will see, while a gated community in Cambodia (CamKo) markets its reliable electricity and clean tap water, a Leisure Town in Abu Dhabi (Saadiyat Island) wows the world with five Pritzker-winning architects and a new global cultural hub. Each town is luxurious and safeguarded relative to the surrounding economic reality; it is only an escape if it surpasses expectations.

**224** In the Middle East, the economic boom of the early 2000s brought with it a new wave of international interest. This interest came in the complimentary forms of both foreign investment and tourism. The construction industry could hardly build fast enough. In the wake of this fever, the Middle East was still left with many Resort Cities, playgrounds and boomtowns filled to capacity. The rich new cities boasted every form of entertainment and leisure, without the urban distractions of 'problem' neighborhoods. The cities became so ubiquitous that marketing strategists began looking for the next step in Resort Cities: the city you go to when you need a break from the resort.

**225** <http://www.almadinaazarqa.com/>, retrieved on May 10, 2010.

All Enclave Cities are characterized by a high degree of spatial segregation in the form of both physical enclosures and exclusionary pricing. These towns are oases of luxury in both developing and developed nations. The wealthier the surrounding context, the more exclusive these communities become.<sup>223</sup> Although thematically different, the formal language of these New Towns is surprisingly similar. The Enclave City's urban form is intended to communicate enclosure, protection, luxury and exclusivity. On top of these promises, the Enclave City provides an attractor mechanism to gain a leg up in what is an increasingly competitive global market. A pristine beach and exotic locale is no longer sufficient to attract the type of tourist (or resident) targeted by the glossy marketing material. Instead, a specification (i.e. 'cultural tourism', 'medical tourism', 'eco-tourism') is attached to the development as way of carving out identity among a mass of similar options.

The case studies in this chapter represent a broad interpretation of the Enclave City, though certainly not an exhaustive one. All three examples can be interpreted as urban enclaves within an extremely different cultural and social context, and thus somewhat escapist realms of privilege. In the first case study, Saadiyat Island, UAE, the physical boundaries of the New Town are the shores of the Persian Gulf.<sup>224</sup> The New Town is defined by the limits of the island—an extreme example of spatial segregation. In the second case study, Al Madina A'Zarqa ('The Blue City'), Oman, the edges of the New Town are delineated by the municipal irrigation system. Where the New Town ends, an inhospitable desert landscape begins. In CamKo City, Cambodia, the borders of the New Town are defined in a less conventional way. The 120 ha New Town is actually one big gated community. A six-lane road encircles the development, which then gives way to an imposing ring of high-rise apartments. Located in the outskirts of Phnom Penh, the area is still mostly low rise, giving the towers a visual dominance over the skyline. The New Town turns its back on Phnom Penh, focusing instead on the shores of Pong Peay Lake, a recreational hotspot.

Such Enclave Cities are intrinsically linked to the authoritarian regimes that control them. Without the top-down efficiency and production speed granted by governments with a stake in the outcome, these developments would no doubt face more difficulties and longer time frames. As part of national strategies to diversify one-trick pony economies, however, these Enclave Cities become the darlings of both public- and private-sector agents. In Abu Dhabi, the government-owned TDIC (Tourism Development and Investment Company) is wholly responsible for the Saadiyat Island project. In Oman, Al Madina A'Zarqa is being developed by ASIT (Al Sawadi Investment and Tourism Company), which has "the endorsement of the government of Oman to bring this massive urban development to life."<sup>225</sup> CamKo, however, comes about as the direct initiative of Korean investors. The Korean Bank has invested \$65 million in this area of north of Phnom Penh, with the blessing of the Cambodian government.

The different themes associated with each Enclave City are about shifting identities at a national scale. While Abu Dhabi is perhaps currently best known as the oil-rich neighbor of Dubai, investors in Saadiyat Island are hoping to rebrand the city as a global cultural hub and major tourist destination. By purchasing a 'wing' of the Louvre, constructing a new Guggenheim and contracting award-winning architects to produce iconic buildings, the government hopes to rework its reputation and simultaneously diversify an oil-based economy.

Al Madina A'Zarqa will create an identity that shifts between leisure and health resort. International medical facilities will make this New Town a sort of modern reincarnation of the Victorian seaside. Oman will join India, Singapore, South Korea and the UAE, which have already established medical tourism as a potential economic engine—in fact, more than 50 countries have identified medical tourism as a national industry.<sup>226</sup> The idea of a city-scale health resort has connotations of both caring and well-being. The national government hopes that the development will help craft an image of social empathy and trust, attracting tourists, residents and again, diversifying an oil economy.

CamKo is less focused in its marketing: the New Town boasts government facilities and will be the new home of a Cambodian stock exchange, but the real selling point is CamKo's infrastructure: new roads, built-in Internet capabilities and reliable plumbing are all part of a strategy to market CamKo as "Cambodia's first world-class new district project."<sup>227</sup> The New Town should signal to the global community that Cambodia is developing into a 'world-class' destination, and thus attract foreign investors. The value of these developments as symbolic capital thus far outweighs their limited financial value. As attractor mechanisms and advertising tools, they are invaluable assets to their respective regimes. As destinations, they reinforce (or create) an image, whether warranted or not, of a specific location.

The Enclave Cities act as a sort of self-perpetuating phenomenon: as these exclusive developments spring up, there must always be a *more* exclusive community to join. The luxury and security requirements become higher and higher until they truly do become Mumford's unique landscapes dedicated to "the preservation of illusion... This was not merely a child-centered environment: it was based on a childish view of the world, in which reality was sacrificed to the pleasure principle."<sup>228</sup> As enclaves for a single economic stratum, these New Towns allow and encourage a disengagement from the surrounding reality that is always great, and sometimes, outrageous.

**226** Today, nearly five million patients travel for their health care, according to Josef Woodman, author of *Patients Without Borders*. See also: Gahlinger, P.M., *The Medical Tourism Travel Guide: Your Complete Reference to Top-Quality, Low-Cost Dental, Cosmetic, Medical Care & Surgery Overseas*, Sunrise River Press, 2008.

**227** [http://www.aecom.com/Where+We+Are/Asia/Economics/\\_carousel/Business+Planning+Services+for+Phnom+Penh+New+Town+\(Camko+City\)+Cambodia?languagehoice=fr\\_CA&Go=Go&localeHidden=fr\\_CA&localeFlash=ru\\_RU](http://www.aecom.com/Where+We+Are/Asia/Economics/_carousel/Business+Planning+Services+for+Phnom+Penh+New+Town+(Camko+City)+Cambodia?languagehoice=fr_CA&Go=Go&localeHidden=fr_CA&localeFlash=ru_RU), retrieved on December 3, 2010.

**228** Op. Cit. Mumford, p. 494.



# The Blue City

## Oman

**Designer:**  
Foster + Partners

**Expected residents:**  
200,000

**Client:**  
Al Sawadi Investment &  
Tourism Company (ASIT)

**Expected costs:**  
\$20 billion

**Contractor:**  
AECO

**Date:**  
2006-2020

**Consultants:**  
WS Atkins & Partners Overseas  
(Environmental Consultant,  
UK), Associated Consulting  
Engineers (Engineers, Global),  
EMCOR Facilities Services  
(Facilities Management,  
Global), Hanscomb & Co.  
(Cost Consultant) and Hyder  
Consulting Middle East Limited  
(Infrastructure Consultant)

**Status:**  
Under construction, but heavily  
delayed

**Size:**  
34 km<sup>2</sup>

**Location:**  
23°46'48"N, 57°47'24"E







Foster + Partners' design imagines the coastal town as a health and beach resort, 2009.

## The almost-city

Al Madina A'Zarqa sits 100 km up the coast from Muscat, past date farms and a camel-racing course. As you travel northwest on A'Seeb Street, the four-lane road is remarkably green; verdant strips flank the highway on both sides, eventually giving way to endless desert scrub. Layers of green insulate the asphalt while date palms, flowering bushes and swaths of grass occupy the dividing center strip; all irrigated with water more precious than oil. In such dry climes, the green really does feel luxurious, almost decadent.

This decadence is carried further in the plans for Al Madina A'Zarqa—also known as 'The Blue City'. In both scale and ambition, this New Town is unlike anything Oman has done before. Though there are some mid-scale residential developments popping up, with planned housing for 200,000 residents, world-class medical facilities and a university, The Blue City is one of a kind. In just a decade, 34 km<sup>2</sup> of arid desert landscape should be turned into the most luxurious resort city in the country. Right now, a 4x4 jaunt through the construction site is more like an adventure tour—scrub grass and desert sand still cover the majority of the area. Goats and dogs crisscross the unpaved roads, lost in the dust except for the tinkling of their bells. At one edge of the New Town site, a small village (destined for demolition) boasts a single gas station and multi-colored houses. But in the distant haze, the skyline of Phase I is slowly rising.

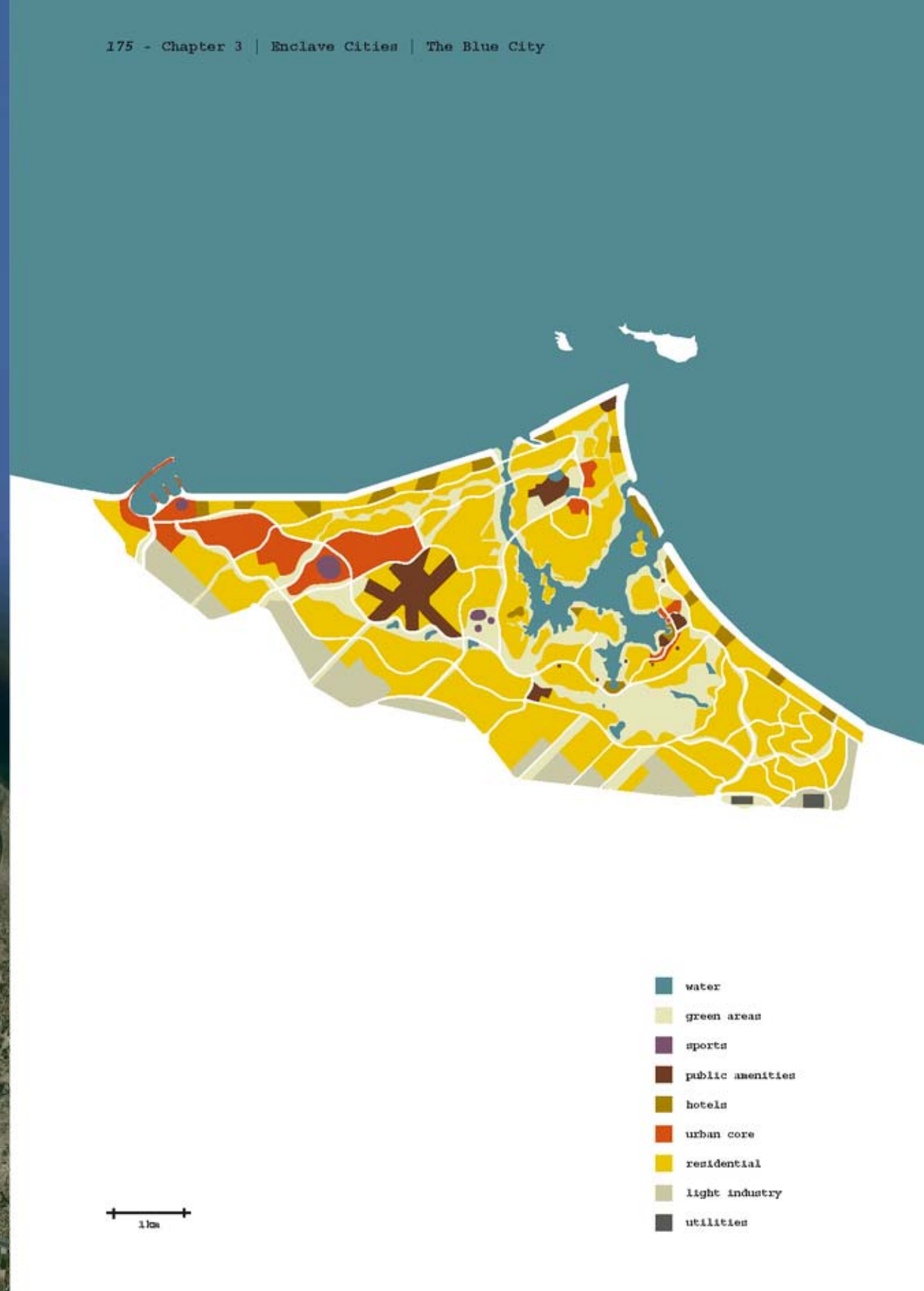
And yet, The Blue City—as *planned*—still might not materialize. The past three years have seen the project in stop-go mode, with most of that time spent in limbo. The city has suffered from major funding problems, (culminating in a 99.1% debt buyout by an Emirati company) as well as some court action between two major developers. The issues have caused investors to think twice, resulting in a drop in stock prices. The domino effect has put the project on hold, and for now, the future of this bold design remains unclear.

## A modernist sultan

Governed by the suave Sultan Qaboos bin Said Al Said since 1970, Oman is an Islamic absolute monarchy. In addition to his position as Sultan, Qaboos also serves as prime minister, defense minister, finance minister and minister of foreign affairs, giving the ruler a massive amount of direct control over the sultanate. Throughout his time in power, Qaboos has been recognized for his commitment to the country's development and modernization. His efforts, quite deliberately, have been in direct contrast to Qaboos' father, Sultan Said bin Taimur, who ruled the country from 1932 until 1970, in total isolation from all other nations.<sup>229</sup> Sultan Said's stringent policies affected every aspect of Omani life. According to the Oman Ministry of Information, during his reign, "Curfews were imposed: anyone found outside the city walls after the retort of the cannons would be shot unless he carried a lantern. Radios were banned as they were considered the work of the devil. Healthcare was virtually non-existent: in 1970, there was only one missionary hospital in Muttrah and a handful

<sup>229</sup> Sultan Sa'id ibn Taymur was notoriously resistant to so-called Westernization. He ran the sultanate as a feudal monarchy, erratically banning the use of automobiles and the wearing of sunglasses. No one was allowed to purchase or renovate a house without his express permission, leave the country, or smoke in the street. When the Army band met with his displeasure, the capricious king allegedly had their instruments thrown into the sea. Omanis were less than pleased with their despotic leader. After an assassination attempt in 1966, the sultan became reclusive and increasingly unreliable, he barricaded himself in the palace at Salalah, 800 km south of Muscat. During his years as ruler, Sultan Sa'id ibn Taymur "revealed a mastery of statecraft and an indifference to public opinion worthy of the most dedicated disciple of Machiavelli." Cheney, S.A., *The Insurgency In Oman, 1962-1976*, Marine Corps Command and Staff College, April 1, 1984.







**230** <http://www.omanet.om/english/government/hmspage/tribute.asp>, retrieved on September 8, 2010.



Sultan Qaboos bin Said al Said, ruler of Oman since 1970, is known for his commitment to modernization, education and health care, 2009.

**231** Cheney, S.A., *The Insurgency In Oman*, 1962-1976, Marine Corps Command and Staff College, April 1, 1984. The anecdote regarding Qaboos' records also appears in an article from TIME magazine: "Oman: Emerging from the Dark Ages," TIME, June 4, 1979, p. 37.

**232** <http://www.omanet.om/english/government/hmspage/tribute.asp>, retrieved on September 9, 2010.

**233** Experts estimate that Oman has another 15-20 years of oil production at the current rate. Though still a net exporter, proven reserves of only 5.5 million barrels puts Oman far behind its GCC competitors. See the US Energy Information Administration's independent analysis at: <http://www.eia.doe.gov/cabs/Oman/Oil.html> for more information about Oman's current energy situation.

**234** As a telling anecdote, foreigners use the story of a temporary Rembrandt exhibit held during Ramadan in 2009. When the etchings were presented for official approval, the Minister of Culture

of admission units in Muscat. Only three schools existed throughout the whole State—having been built at an average rate of one every nineteen years."<sup>230</sup>

Although the young Sultan Qaboos was sent abroad to study at Sandhurst Military Academy in England, when he returned to the isolated country as a worldly and educated traveler, his father balked at the results. Western education had transformed the quiet boy into an elegant young man, full of British charm. For the next six years, the young Sultan was placed under house arrest at the family palace in Salalah. His father claimed that he "had been corrupted by his studies in England, and upon hearing strains of Gilbert and Sullivan echoing in the palace, destroyed all of his son's records."<sup>231</sup>

On July 23, 1970, Qaboos overthrew his father in a bloodless coup, banishing him to the same England that had 'corrupted' the son, and promising in a radio broadcast that he would abolish "all unnecessary restrictions that overburdened you... I will take the necessary legal steps to ensure the recognition of foreign powers and I am looking forward to the immediate support and the long-range cordial cooperation with all nations, especially with our neighbors, with whom we will conduct consultations for the future of our area."<sup>232</sup>

Sultan Qaboos was as good as his word, and immediately began a national strategy of modernization. Within the first five years of his rule the sultan had established 262 new schools and institutions, joined the League of Arab Nations and the United Nations, built the country's first international airport and initiated a low-cost housing scheme. All of these developments were made possible by the sale of crude oil. While Qaboos' achievements seemed like divine intervention for many, it is impossible to separate the Sultan's progressive moves from their international context, or to make a distinction between the results of Qaboos' influence, a steady influx of petrodollars and global modernization.<sup>233</sup>

In the four decades since his ascension, Sultan Qaboos has effectively transformed an insular, dogmatic nation into a state that is now known for its neutrality and religious tolerance. The effect is especially striking in a region plagued by fundamentalist views and internal violence.<sup>234</sup> Despite the lack of democratic process, the sultan's policies have generally been popular with the Omani people. The sultan is never criticized in public or by the (state-owned) media. Many of the older inhabitants still remember goat herding under the sultan's father, and contemporary life in an open, wealthy dictatorship perhaps seems a fair trade-off.

Recently, however, the younger generation of middle-class Omanis have expressed growing impatience with what is perceived as 'rampant corruption and nepotism' in the upper echelons of Omani society.<sup>235</sup> Oman's political structure attempts a careful balance between tolerance and top-down control, but it also employs the tried-and-true Bedouin system of wealth distribution from above. This system is a holdover from

the tribal era, but the implication is still clear: *everything you have comes at the whim of your leader*. Because Sultan Qaboos' power is absolute, he alone receives all the credit and all of the blame. In February 2011, this dichotomy became more apparent than ever when clashes between state security officers and protesters suddenly shook the sultanate. Hundreds of Omanis gathered in Sohar to demand political reforms and more employment opportunities. According to reports, two protesters were killed, and another ten were wounded by rubber bullets and tear gas.<sup>236</sup> Unlike protests taking place around the same time in other Arab states, however, the protests were not aimed at the Sultan himself, but rather at a lack employment for the young population, as well as government corruption.

## New Arabian

Foster + Partners' plans for The Blue City are massive and ambitious in the Omani context. Along a triangular piece of land jutting into the Arabian Sea, the planners have designed a city for 200,000 people. The triangle is bounded on its southwestern edge by a coastal highway that also links the New Town to Muscat, 100 km south.<sup>237</sup> Light industry parallels the highway, providing a soft edge between the interior residential areas and the unbroken desert just across the artery. Public amenities appear in small cores dotted amid the massive swath of residential program. One such core is reserved for medical and research facilities, another is dedicated to entertainment, a third to trade. The largest is designed as an education hub, with facilities ranging from kindergartens to universities. A large 'urban core' at the northern tip of the plan links to the city's marina. The triangle's interior is mostly classified as 'green', with a natural creek providing a source of leisure, as well as protected wetlands. Along the shore, residential communities alternate with hotels and resorts. According to Foster + Partners, the beaches lining the triangular site will be upgraded to 'resort standards' and the creek (or Al Khor) and wetlands will be enlarged to create a more substantial waterway. Along the Al Khor and shoreline, hotels, restaurants and shaded walkways will activate the areas. Another network of pedestrian paths will extend into the urban core.<sup>238</sup>

The Blue City was originally planned to undergo construction in twelve phases stretched over a fifteen-year period, from 2005-2020. Government and private interests are heavily intertwined within the sultanate, and despite the project's status as a private development,

did not even bat an eye at the plethora of biblical themes. While there were stipulations about nudity, Jesus, it seems, was alright with them.

**235** Allen, C.Jr. and Rigsbee, W.L. III, *Oman Under Qaboos: From Coup to Constitution*, 1970 – 1996. Frank Cass Publishers, London, 2000, p. 62.

**236** The events in Oman follow a series of civil disturbances across the Arab world, beginning in Tunisia and spreading to Egypt, Algeria, Iran, Yemen, Jordan, Iraq and Bahrain. Many of the protests have resulted in serious concessions from autocratic governments—in Tunisia, the 'Jasmine Revolution' culminated in President Ben Ali absconding to Saudi Arabia. Less than a month later, Egypt's President Mubarak was forced to step down. See: Bakri, N. "Oman joins protest wave, and 2 die in clashes with police", *The New York Times*, February 27, 2011.



Wetlands are preserved along the creek (Al Khor) to provide relief from the burning temperatures.

**237** Muscat is the capital of Oman, with roughly one million inhabitants.

**238** <http://www.fosterandpartners.com/Projects/1604/Default.aspx>, retrieved on September 9, 2010.



Looking to the south, The Blue City stretches into the sea. The city's borders are clearly delineated by a highway that separates the New Town from the desert sands.





Phase 1 of the Blue City, under construction, 2010.







the Planning Department at the Ministry of Tourism is responsible for the main infrastructure, including roads, water, electricity and telephone connections. The Ministry also has final say over any proposed resort city masterplans.<sup>239</sup> In the case of Al Madina A'Zarqa, the first masterplan was immediately approved upon submittal.

The city's architecture and urbanism are similar to Foster + Partners' designs for Masdar City in that they are low-rise, inspired by historical styles, and quite dense. The renderings of snug, shaded pedestrian paths once again reflect an attention to traditional Arabian design, and even incorporate the ancient Omani *afraj* irrigation system in the plans.<sup>240</sup> Foster + Partners have transformed these traditional underground channels into visible watercourses that act as structuring elements on the ground plane. The residential architecture is a modern interpretation of historical Arabian domestic typologies, employing the flat roofscapes and orthogonal forms typical of this region. The designers couple these vernacular elements with modern technologies to achieve better climate control in this harsh region.<sup>241</sup>



Currently under construction, the first phase of the project includes 2.8 km<sup>2</sup> along the Al Khor that will be developed into 3233 apartments and villas for 16,000 residents. The residential areas are designed as neighborhoods with auxiliary facilities such as clinics, schools, libraries, retail centers, restaurants, hotels and mosques.<sup>242</sup> Foster + Partners' masterplan uses a clustering organization to translate the traditional Arabic private courtyards and narrow alleys into a modern metropolis. According to the architects' description: "Each residential community will have its own identity. The apartment buildings will offer residents their own private courtyard and discreet car parking. The material palette will comprise locally sourced stone and timber. Borrowing from the indigenous architectural heritage, the design is small scale, compact and organic. It is

inherently sustainable through passive means, such as natural ventilation, careful orientation—to minimize direct sunlight and maximize ventilation—and the manipulation of the thermal mass of the buildings. The communities have a layered concentric structure, with each layer becoming more private and intimate as it retreats to the heart of the residences—respecting Omani traditions of privacy and an internalized architecture as seen on the Omani heritage settlements of Bahla and Manah. Designed to appeal to a diverse social mix, the residences will combine a variety of different scales and types."<sup>243</sup>



In Foster + Partner's presentations rooftop pools glitter at dusk, a mix of Arabs and foreigners explore a street scene, and light filters through a screen.

**239** There is no planned low-income or subsidized housing, and it is unclear what will become of the existing town. According to Mr. al Maamari, Director of Planning at the Ministry of Tourism, "No one lives there; only a few fishermen further up this coast." This is not true. When we visited the site, there was a bustling of village on the site where The

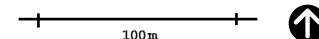
The variety of scales and types can only extend so far, however. Oman's strict building regulations are infamous in a region where glittering skyscrapers have become the norm. In an effort to preserve the architectural homogeneity of the sultanate, regional municipalities develop exacting building codes for local areas. "Municipalities are responsible for issuing detailed building regulations, which set out specific requirements for buildings built within the local area.

Those powers can, however, only be exercised within a framework established on a national level.<sup>244</sup> A key principle that the Ministerial Decision purports to uphold is the maintenance of the intrinsic character of the Arab and Islamic heritage of Oman."<sup>245</sup> These building restrictions limit the height of buildings in order to preserve the low-rise traditional aesthetic of the urban fabric. Building codes also require that sloped roofs be visually concealed, thus the giving the illusion of a predominance of flat roofs. Limitations on exterior paint colors (usually white or some camouflaged shade of sand) also lend consistency to Omani architecture.<sup>246</sup> In the shimmering desert heat, the pale palette almost disappears.

But the government's regulations on color and material are taken less seriously the further from Muscat one travels. In the village currently occupying the future home of Al Madina A'Zarqa, houses come in every color of the rainbow and glitter with mirrors and bright tiles. The renderings for the New Town have a somewhat more sober aesthetic, with facades obediently stuccoed in shades of cream. Oman's strict building codes have clearly played a role in Foster's conservative designs.

Phase 1 includes a dense neighborhood with a traditional organization.

- hotel
- mixed use
- residential



Blue City will someday rise. Housing ran the gamut from shanty to brand new villas. Gas stations, shops and goat herds dotted the main drag through town, and none of this appears on either maps or in the mouths of developers.

**240** The *Aflaj* (sin. *falaj*) system involves a series of man-made underground channels that divert water from mountain or subterranean sources for use in both agriculture and domestic life.

**241** We travelled to Oman in early May, when the summer heat was just beginning to crash down on the dusty streets. But even this early in the season walking anywhere between 12:00 and 14:00 was like taking a stroll through hell. Al Madina A'Zarqa is intended as a tourist destination, and for Europeans looking to escape leaden February skies, 26°C will be a welcome relief. May to October, however, (when average temps edge into the 40s) may send even the most dedicated sun-worshippers fleeing for air conditioning.

**242** <http://www.fosterandpartners.com/Projects/1604/Default.aspx>, retrieved on September 9, 2010.

**243** The 'diverse mix' targeted by Foster + Partners is defined by the Ministry of Tourism as 60% European and 40% GCC nationals, with no social housing. <http://www.fosterandpartners.com/Projects/1604/Default.aspx>, retrieved on September 9, 2010.

**244** Ministerial Decision 48/2000 sets out the national building regulations. That law has established the basic framework for obtaining building permits and some key requirements that apply to any building activity within the sultanate.

**245** Schofield, C., "Regulatory Framework: Building by Rules", *business today.com*, August, 2007. <http://www.apexstuff.com/bt/200708/legal.asp>, retrieved on July 23, 2010.

**246** The Supreme Committee for Town Planning is in charge of the planning strategy at the national level. "This Committee, which was established





The existing village of Suwadi al Batsa, on the site of the future New Town, has mainly single-story buildings and dirt roads, 2010.

in 1985, draws up general town planning policies in the light of the country's development plans. It is responsible for following up the implementation and development of approved planning programmes, devising criteria for valuing properties which have been compulsorily purchased for public utilities under the law, and removing any material or financial obstacles to the implementation of plans which have been approved.

The Committee is chaired by His Excellency Malik bin Suleiman al Ma'amari, Minister of Transport and Housing." <http://www.omanet.om/english/oman2000/sec3/1.asp>, retrieved on July 26, 2010.

So what kind of city might this New Town be? A picturesque city, certainly: Foster + Partners' organic plan is full of curving, tree-lined streets and shady cul-de-sacs. The pleasant, village-like organization recalls New Town predecessors like Letchworth Garden City and Reston, Virginia. But this is a city of 200,000 inhabitants, dedicated to medical tourism and leisure facilities: perhaps people will come here to have surgeries performed and then stay for an extended recovery period. Perhaps the town will be full of patients, resting on rented balconies, contemplating the Gulf of Oman. World-class medical facilities are in short supply in Oman, and a city offering reliable medical procedures would almost certainly attract wealthy patients from throughout the region.

The 10,000 students at the proposed university would probably stay near campus, heavily segregated from the ailing visitors. The Gulf Cooperation Council (GCC) nationals who make their homes in Al Madina A'Zarqa might have a distinctly different experience of the city, keeping to their offices or villas during the day, while populating the museums, theatres and shopping centers during evening hours. The scorching climate would, in any case, confine most tourists to the air-conditioned interiors between the months of May and October—at least until sundown.

## Omanization

Oman's population of almost three million inhabitants includes about 600,000 non-nationals. The median age is 23.9. This relatively young and diverse population, combined with the sultanate's dedication to modernization, makes for a country that is considerably less restrictive than neighboring GCC countries in terms of its attitudes towards both women and religious tolerance.<sup>247</sup> More than 75% of the country practices Ibadi, a sect of Islam separate from the Sunni and Shia denominations, and the country continues to project a stable and welcoming international image. As Islamic expert Valerie Hoffman writes, this mix of tolerance and traditionalism has worked in the sultanate's favor: "So far Oman has managed to avoid unthinking Westernization and its corollary, Islamic reactionism. Islam remains an important part of life, but in a thoroughly natural and non-politicized way."<sup>248</sup>

Since the mid-1990s, women have been encouraged to pursue both higher education and professional careers. A CNN article from 2010 quoted Omani businesswoman Miriam Belhaf on her impressions of women in the workforce. "I want to prove that a woman can do everything... She can make success by herself, she can prove herself by her own business. I don't need people to help me. So this is my secret."<sup>249</sup> Miriam's beliefs are proving to be widespread; in 2010, women made up 20% of the Omani workforce, and more women than men graduated from universities.<sup>250</sup> While discrimination endures in some places, (especially in rural areas) women in Oman are strides ahead of their counterparts in some neighboring states. This attitude is welcomed by Western tourists and expats, and is expected to enhance the sultanate's desirability as a tourist destination. According to Salem al Maamari, Director of Planning at the Ministry of Tourism, the planners expect 60% of the New Town's residents to be European, with the remaining 40% coming from the six GCC countries.<sup>251</sup>

Part of the New Town's background story is Oman's 2020 Vision. The strategy lays out the development goals for the country. The plan was drafted in 1998, when oil dropped to \$10 a barrel and things were looking bleak for the petro-dependent sultanate. The diversification program was drawn up by working groups from every Ministry, and focused national resources on a trifecta of infrastructure, shipping and tourism development. Despite Oman's relatively large oil reserves, the country cannot compete with other GCC countries—and it would be dangerous to try.



When completed, the Blue City (200,000 inhabitants) will surpass the nearby commercial center Mutrah (150,000 inhabitants), 2010.



A newly-built villa with gold gates in the existing village of Suwadi al Batsa, 2010.

<sup>247</sup> As an illustration of the religious tolerance of Omani people, when curious locals asked about our religion (we were told to say 'Christian' when in doubt), they responded to the news with cheerful cries of "Same God! Same-same!"

<sup>248</sup> Hoffman, VJ., Ibadi Islam: an Introduction, full text online at: <http://www.uga.edu/islam/ibadis.html>, retrieved on August 9, 2010.

<sup>249</sup> Maktabi, R., "Oman's women entrepreneurs mean business" CNN, August 27, 2010. [http://edition.cnn.com/2010/WORLD/meast/08/27/oman.businesswoman/index.html?section=cnn\\_test#fbid=nbriu3d3Nf&wom=false](http://edition.cnn.com/2010/WORLD/meast/08/27/oman.businesswoman/index.html?section=cnn_test#fbid=nbriu3d3Nf&wom=false), retrieved on September 9, 2010.





Houses under construction in The Wave ITC development, southeast of The Blue City. The white, flat-roofed architecture is consistent with planning regulations, 2010.

**250** [http://edition.cnn.com/2010/WORLD/meast/08/27/oman.businesswoman/index.html?section=cnn\\_latest#fbid=nrdu3d3Nf&wom=false](http://edition.cnn.com/2010/WORLD/meast/08/27/oman.businesswoman/index.html?section=cnn_latest#fbid=nrdu3d3Nf&wom=false), retrieved on September 9, 2010.

**251** Interview with Mr. Salem al Maamari, Director of Planning, Oman Ministry of Tourism, Muscat, 2010.

**252** The Report: Oman 2010, Oxford Business Group. <http://www.oxfordbusinessgroup.com/publication.asp?country=31>, retrieved on July 26, 2010.

**253** Sultanate of Oman Ministry of Information <http://www.omanet.om/english/oman2004/ECONOMIC%20DEVELOPMENT.asp>, retrieved on July 17, 2010.

Although hydrocarbons currently account for about 75% of the nation's export earnings and around 50% of its GDP, the country has acknowledged the urgency of supplementing petrodollars with new sources of income.<sup>252</sup>

The sultanate's Sixth Five Year Plan (2001-2006) concentrated on economic diversification by pursuing the sultanate's policy of 'Omanization' to build more job opportunities for Omanis, adopt sound financial policies and strengthen development of the private sector.<sup>253</sup> The Plan also led to increased privatization, including the Seeb International and Salalah Airports. According to the Ministry of Information, there are also plans to privatize the sewerage and waste disposal systems, water, the national postal service, the national transport company and the administration of seaports.<sup>254</sup> According to Oxford Business Group's *The Report: Oman 2010*, "by 2020 the government aims to derive 3% of GDP from the tourism sector and fill 80% of tourism jobs with citizens. Current statistics show that Oman is well on track to meet these goals, and the sector currently contributes about 2.1% of GDP. To increase revenues and limit the effects of mass tourism on traditional culture, the sultanate is specifically targeting luxury tourism. To this end, golf courses, high-end marinas, and an international-standard stadium for concerts and sporting events are either in the works or already built."<sup>255</sup>

To support and oversee these developments, Royal Decree No. 61/2004 established the Ministry of Tourism and appointed Rajiha Abdul Amir Ali—a woman—as its minister.<sup>256</sup> Shortly after the Ministry was established, the ITC model was agreed upon as an effective means of achieving the nation's economic goals. The Omani ITC model, or 'Integrated Tourism Complex', is an urban marriage of tourism and residential areas, with a minimum footprint of 200,000 m<sup>2</sup>. The term was introduced in the late 1990s, when plans to construct the country's first grass golf course (sand courses existed) attracted interest from potential foreign buyers. The project, known as Muscat Hills, became the first area in Oman to allow foreigners freehold ownership. As of 2011, 22 ITCs have been proposed, and thirteen already have approval from the Ministry of Tourism, including The Blue City.<sup>257</sup> All of the developments are located along the coast, indicating a desire to maximize this country's natural assets. By focusing on wealthy tourists and foregoing the masses, Oman's coastline will emerge as a series of luxury resort cities in retro-Omani style. This 'authentic' luxury will attract limited users, protecting the natural beauty and still supplying a substantial chunk of the GDP.

The ITC model allows foreigners to buy freehold property in what is otherwise an Omani-only market.<sup>258</sup> Buyers also receive resident permits for themselves and their families. Because Oman has no personal taxation, this can be an attractive option. In fact, the typical ITC model is conceived with a demographic split between 60% European and 40% GCC nationals, including Omanis. The concept was first implemented in 2004, and so far the Ministry of Tourism has developed The Wave, Muscat Hills, and Seeta Beach Resort. According to the Oxford Business Group, the ITCs currently under construction are "mixes of holiday villas, hotels, resorts and shopping centers... [They are] some of the biggest projects under way in the sultanate today and are expected to become the lynchpins in future development. But the global financial crisis prompted Oman to slightly re-think its vision for the tourism sector and the coming year should provide more clarity on the future of its projects. Unlike other major tourism players in the region—such as Dubai—Oman has opted for a more subtle style of development to avoid over-building. At the same time, it is seeking to increase capacity to meet its stated goals, with hotel additions and airline expansions under way to meet expected demand."<sup>259</sup> Oman, and the Blue City in particular, have not been immune to the global financial crisis of 2008-2009. When construction began in 2006, people queued for hours in hopes of buying property in the development. By 2010, signs had begun to appear in windows and newspapers: 'villa for sale'.

### Close to liquidation

Despite these conflicts, Oman has had the benefit of learning from the mistakes of some of its Emirate neighbors. Unlike Dubai and Abu Dhabi, the sultanate has established a clear mandate for 'Omanization'—creating skilled-labor jobs for Omani nationals. While the UAE has a more than 90% expatriate private sector labor force, Oman has only about 60% non-national workers.<sup>260</sup> Part of the 2020 Vision is a commitment to increase the proportion of Omani nationals to foreigners in the workplace. Oman has also pursued a slow and steady development program, and deliberately concentrated on foreign trade. The Oxford Business Group concludes, "The country has made concrete moves to develop trade links with Asia, including investments in three major ports on the Indian Ocean and numerous free trade agreements within the region. Trade links with Asian powerhouses India and China in particular are on the rise—China now buys about 40% of Oman's oil."<sup>261</sup> A free trade agreement with the United States went into effect in 2009, further strengthening the sultanate's international trade network.<sup>262</sup>

The Blue City was conceived as the ultimate ITC, a global symbol of the sultanate's clever approach to development. It has proven instead to be the country's most publicized planning challenge. As of March 2010, *riskandforcast.com* described The Blue City as "close to liquidation".<sup>263</sup> In June 2010, Essdar Investments Ltd. (a Cayman Islands-based investment fund owned by members of the Abu Dhabi ruling family) stepped in to rescue the New Town. Essdar bought 99.1% of the Blue City's debt and

**254** Ibid.

**255** The Report: Oman 2010, Oxford Business Group. <http://www.oxfordbusinessgroup.com/publication.asp?country=31>, retrieved on July 26, 2010.

**256** <http://www.omanet.om/english/tourism/thome.asp?cat=tour>, retrieved July 20, 2010.

**257** The ITCs currently under construction include The Wave, a development with 4,000 residential units along the beach in Muscat; Salam Yiti, a luxury resort south of Muscat with more than 2,000 residential units; and The Muriya Tourism Development, which includes the beachfront communities of Salalah Beach, Jebel Sifah, Wadi Al Qurum and Al Soda Island. Many other ITC are in various stages of approval and financing.

**258** In 2006 Oman opened specific Integrated Tourism Complexes (ITC) to foreign buyers. Foreign nationals can buy real estate in these designated areas for accommodation or investment. Royal Decree 12/2006 allows foreign property owners to obtain visas for themselves and their immediate family, and the property will be transferred under the inheritance laws of the foreign national's country of origin.

**259** The Report: Oman 2010, Oxford Business Group. <http://www.oxfordbusinessgroup.com/publication.asp?country=31>, retrieved on July 26, 2010.

**260** <http://www.uae-embassy.org/uae/human-rights/labor-rights>, retrieved on July 27, 2010.

**261** The Report: Oman 2010, Oxford Business Group. <http://www.oxfordbusinessgroup.com/publication.asp?country=31>, retrieved on July 26, 2010.

**262** "Upon entry into force of the United States-Oman Free Trade Agreement (FTA) on January 1, 2009, Oman provided immediate duty-free access on virtually all industrial and consumer products in its tariff schedule, and will phase out tariffs on



the remaining handful of products within ten years. On agricultural products, Oman provided immediate duty-free access for US agricultural products in 87% of agricultural tariff lines. Oman will phase out tariffs on the remaining products within ten years.” <http://www.ustr.gov/trade-agreements/free-trade-agreements/oman-fta>, retrieved on July 20, 2010.

**263** [http://www.riskandforecast.com/post/energy/blue-city-close-to-liquidation\\_448.html](http://www.riskandforecast.com/post/energy/blue-city-close-to-liquidation_448.html), retrieved on July 2, 2010.

**264** Press Release by Essdar Capital Limited. Dubai, June 9, 2010. <http://www.essdarcapital.com/news/index.html>, retrieved on July 26, 2010.

**265** Email from Sarah Ingram, Senior Managing Director, Chief Compliance Officer for Essdar Investments Limited, retrieved on July 27, 2010.

**266** After a few almost-meetings with The Blue City Co., it became clear that no one was going to speak with us. As one designer informed us, it was ‘against policy’ to speak with anyone until the reorganization was complete, a process that is proving to take longer than expected.

effectively saved the city from bankruptcy. A press release from Essdar described the exchange: “As at the Completion Date, the aggregate holding by EIL in respect of the Class A1 Notes and the Class A3 Notes was \$655,500,000 which represents approximately 99% of the aggregate Outstanding Principal Amount of \$661,500,000 for the Class A1 Notes and the Class A3 Notes as at 7 November, 2006.”<sup>264</sup> Although the Blue City was originally planned for wealthy Europeans and GCC natives, the recent buyout by Essdar Investments may well change the development’s direction. When asked to comment on any possible restructuring, a representative from Essdar replied, “I can confirm that Essdar Investments Limited holds Class A Notes issued by Blue City Investments I Limited. However, there are other note holders and parties involved in the project with whom discussions would be necessary.”<sup>265</sup> The city’s main developer, Blue City I Co. Ltd., has been understandably hush-hush about the project.<sup>266</sup> Although the Phase I of Al Madina A’Zarqa was scheduled for completion by 2011, as of July 2010, only 10% of Phase I had reached completion. By February 2011, the city’s official website had removed all construction updates and press releases from the site. Representatives from the Blue City Company I did not reply to requests for commentary on the situation.

Real estate dipped during the economic crisis of 2008-2009, but in early 2011 the market was slowing gaining momentum. Real estate prices are rising again. A \$78 billion investment from the national government is expected to increase private spending power and increase demand. The financial injection should also stimulate infrastructure and the industrial sector. With the economic situation looking up, it will be interesting to see what becomes of The Blue City, and what the ramifications will be from Essdar’s buyout. The future of the largest Omani ITC—that was intended as a symbol of the country’s grand plans and deep pockets—now belongs to Abu Dhabi.



Beachfront villas under construction, 2010.



Expected residents:  
160,000

Date:  
2004-2020

Status:  
Under construction

Cost:  
\$27 billion

Location:  
24°32'8.81"N, 54°26'32.7"E

Designers:  
Masterplan Team led by  
Gensler, with Buro Happold

# Saadiyat Island

## United Arab Emirates

Arabian Gulf

SAADIYAT ISLAND

Mina Zayed Port

Yas Island

CBD

Abu Dhabi

Abu Dhabi International Airport

Khalifa City

Masdar City

water

built area

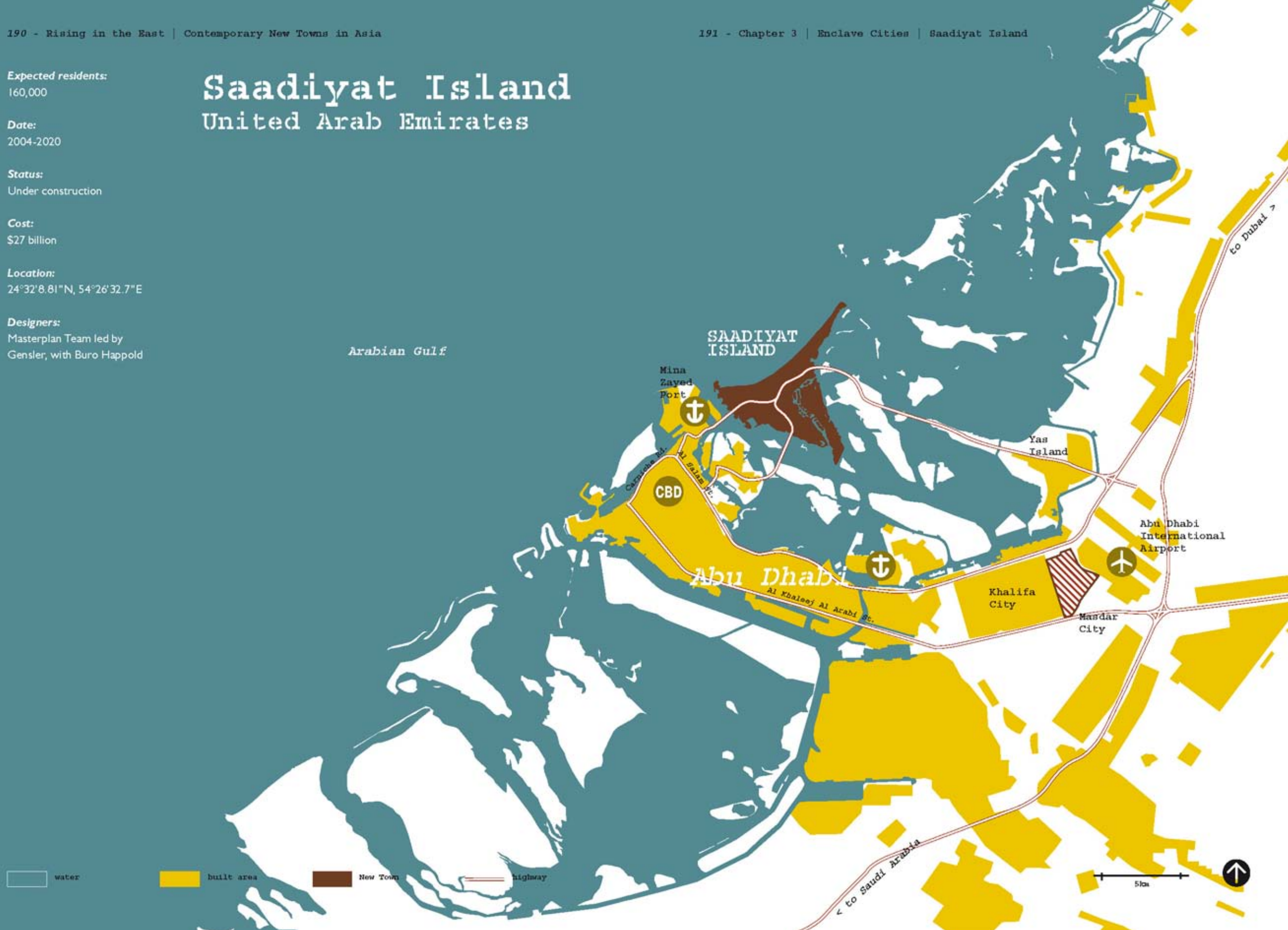
New Town

highway

50m

< to Saudi Arabia

to Dubai >







The Saadiyat Island golf club was the first part of the island to be completed. Although Frank Gehry will eventually design the 18,000 m<sup>2</sup> clubhouse, the existing restaurant and golf shop are designed in a Spanish modern style.

## 'Island of happiness'

One of the first things that one notices about Saadiyat Island is the greenery. In this desert landscape, (much like the coast of Oman) every blade of grass is a sumptuous indulgence. The Saadiyat Island golf course is an exercise in lush green opulence. But then, opulence is really the credo of this island. With sprawling architectural icons by the likes of Gehry, Foster, Nouvel, Hadid and Ando, it seems there really is nothing money cannot buy. When completed, Saadiyat Island is expected to become an international tourist destination for the cultural elite. The goal is similar to Oman's but the strategy is wildly different.

As a visitor to the island, your choices for cultural stimulation are impressive. After a day on the Gary Player-designed golf course, you might stop in the clubhouse (designed by Frank Gehry) for a refreshing drink. Temperatures hover above 40°C from May until September, so staying hydrated is fairly critical. Later, you could meet up with the kids for a family-friendly trip to the new Guggenheim (also by Gehry) or a jaunt through Jean Nouvel's new Louvre. After that, a romantic dinner and a date night might be in order. Drop the kids at the hotel (there are 29 to choose from, and nine of those are five-star establishments) and head to the Zaha Hadid-designed Performing Arts Center to see a visiting ballet troupe or orchestra. In the late hours you can enjoy the sea breeze and a drink at the Marina. Of course, if you actually live on Saadiyat, you might opt to just stay by the pool. Even the Louvre loses its luster when you live next door.

## Resort reinvented

Today, almost all Middle Eastern leisure-based 'resort' New Towns are located around the Persian Gulf. This concentration is mostly due to the desire to move away from oil dependence, with tourism providing a viable alternative market for countries rich in sandy beaches and warm weather. The recent boom in Gulf tourism is the result of both an increase in inter-Arab tourism and a new regional focus on the hospitality sector. In 2010, the Abu Dhabi Tourism Authority reported that leisure tourists now make up 25% of visitors to the emirate state—a number that the emirate would like to see growing quickly in the future.

In today's globalizing world, most of these developments are sold in an international market purely as computer-rendered images. Their value is based on their appeal both as an aesthetic destination and as a global business competitor. So what makes wealthy travelers choose one resort town over another? That question is the impetus for the identity manufacturing that goes hand-in-hand with this typology. While every resort town features five-star hotels, villas, restaurants and shopping, it is this individual focus that differentiates the contemporary resort town from its earlier incarnations. In the 1990s, tourism in the Middle East more than doubled, and that increase encouraged a boom in beach towns. These resort cities have since become so common that a white beach and clear water is no longer enough. In Saadiyat Island, TDIC has filled the gap with





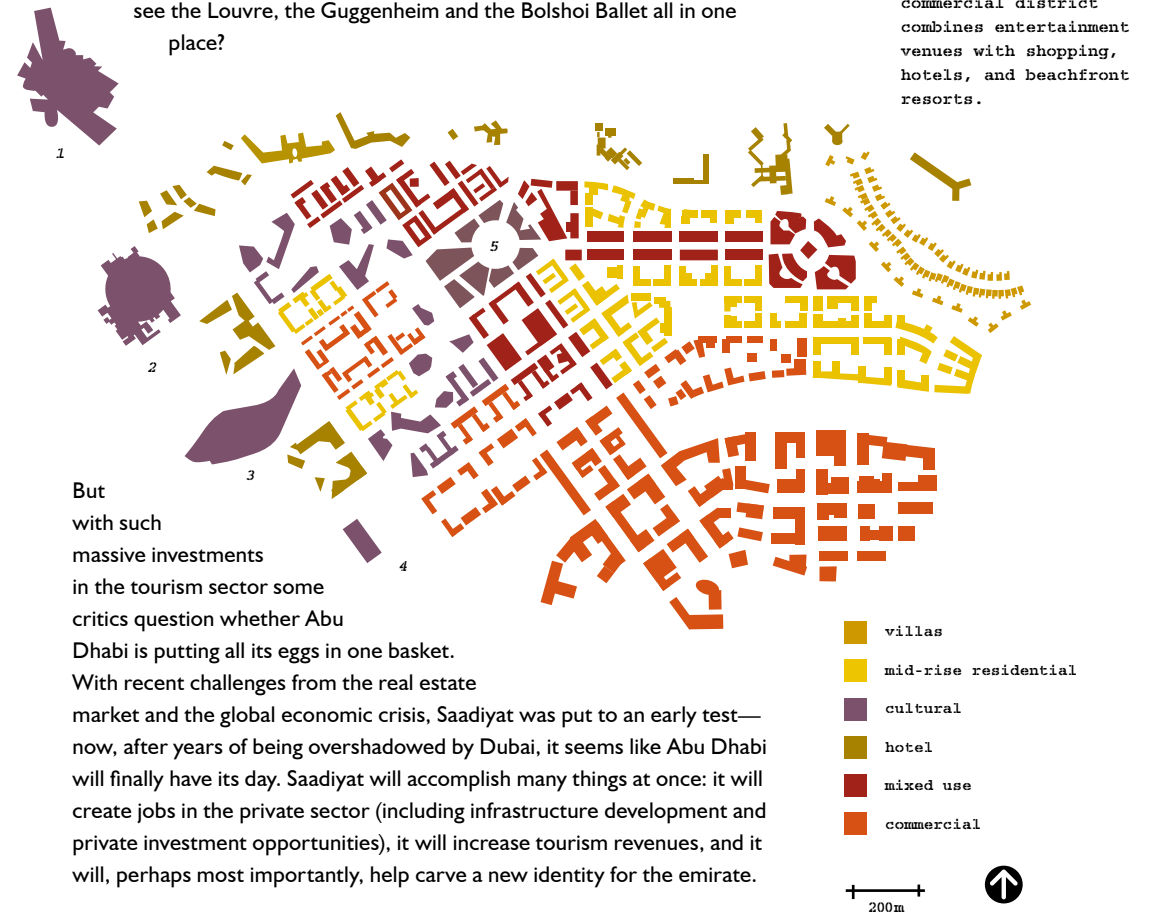




From the water, the Saadiyat museums shimmer at dusk. The Guggenheim can be seen on the far left, followed by the Louvre's huge, perforated dome on the right.

cultural facilities: a new Guggenheim, a new Louvre, a maritime museum, and performance center (all designed by Pritzker Prize-winning architects whose names have become branding tools). This collection becomes the attractor mechanism, while the resort hotels, entertainment facilities and upscale commercial areas provide tangible income.

The symbolic value of these iconic developments thus far outweighs their economic value. As tourist destinations, they construct a carefully marketed image—warranted or not—of a specific location. Rather than perpetuating a global reputation for bottomless fossil fuels and an autocratic dynasty, Abu Dhabi is hoping to challenge the world's existing cultural destinations by concentrating the best of all worlds on a single island. Why fly to Paris, New York and St. Petersburg when you can see the Louvre, the Guggenheim and the Bolshoi Ballet all in one place?



The cultural and commercial district combines entertainment venues with shopping, hotels, and beachfront resorts.

But with such massive investments in the tourism sector some critics question whether Abu Dhabi is putting all its eggs in one basket. With recent challenges from the real estate market and the global economic crisis, Saadiyat was put to an early test—now, after years of being overshadowed by Dubai, it seems like Abu Dhabi will finally have its day. Saadiyat will accomplish many things at once: it will create jobs in the private sector (including infrastructure development and private investment opportunities), it will increase tourism revenues, and it will, perhaps most importantly, help carve a new identity for the emirate.

Although Abu Dhabi came late to the international real estate game (the Tourism Board was only set up in 2004) their hesitancy may have been their savior. In an interview with *Arabian Business*, director general of the Abu Dhabi Tourism Authority (ATA) Mubarak Hamad Al Muhairi said, "I think people didn't take us seriously when we talked about economic diversification. They see Abu Dhabi as an oil and gas economy, but things are changing. People aren't drugged by oil here, they understand in the next few generations that it won't be here. Tourism means jobs and

1. Guggenheim (Frank Gehry)
2. Louvre (Jean Nouvel)
3. Performing Arts Center (Zaha Hadid)
4. Maritime Museum (Tadao Ando)
5. Zayed National Museum (Foster + Partners)





Saadiyat Island, looking south towards the cultural district.

**267** Bladd, J., "Wish You Were Here", *Arabian Business*, February 20, 2010. <http://www.arabianbusiness.com/581848-wish-you-were-here>, retrieved on March 15, 2010.

**268** <http://users.flipbook.com.au/users/2008/4/tdic/#saadiyat-island>, retrieved on March 12, 2010.

opportunities for investment—there's a lot of potential and we're building fast on that."<sup>267</sup> A wholly-owned subsidiary of the state-run ADTA, the Tourism Development and Investment Company (TDIC) is the master developer of Saadiyat Island.<sup>268</sup> The island itself is part of a larger national strategy to diversify the emirate's dependence on petroleum revenues. Next to Dubai's glitzy rise (and subsequent fall), Abu Dhabi's foray into the luxury tourism sector has been characterized by slow and steady development. Sitting on about 10% of the world's petroleum reserves, (and a series of clever foreign investments that now bring in trillion-dollar annual returns) means that Abu Dhabi can afford to take it slow.

### Five Pritzker Prize winners in a New Town

Saadiyat is a naturally occurring island located just 500 m offshore from Abu Dhabi City. The waterway separating Saadiyat from Abu Dhabi is spanned by a bridge that provides car access, and there are plans to build an additional light rail. The connection already brings Saadiyat within five minutes' commute of downtown Abu Dhabi. The island was a desert wasteland until development began in 2004. Since then, plans for the 19 km of beachfront property have exceeded imagination; on what was once no man's land, 29 international hotels, three marinas, two golf courses, and the architecture of five world-famous designers now find a home.

The island was originally masterplanned by Gensler, after they were appointed by TDIC in 2006. Buro Happold was brought on board to assist with engineering and transport planning issues. During the summer of 2006, the 'starchitects' were approached by TDIC and the Guggenheim Foundation about possible involvement. In 2007, Gensler's masterplan was reviewed by EDAW (now AECOM), and the final proposal was approved by TDIC.

The island is divided into seven districts: Cultural District, Saadiyat Marina, Saadiyat Beach, Saadiyat Promenade, Saadiyat Lagoons, Saadiyat Retreat and Saadiyat Reserve. Each district claims a unique identity, catering to specific demographics (families, retired couples, cultural tourists, etc.) and offering exclusive amenities. Because of the size of this island, travel from one district to another will be dependent on car traffic. The scale alone gives each district a sense of remoteness and exclusivity. While vacationing in a rented luxury villa in Saadiyat Retreat, one cannot attend a movie in Saadiyat Marina without hopping in the car and driving seven kilometers across the island.

Jean Nouvel's round design for the Louvre allows access by both land and water.





Foster + Partners' design for the Zayed National Museum is inspired by the feathers of Sheikh Zayed's beloved falcons.



And Saadiyat Marina is indeed the commercial and leisure heart of the island. The high density and high-rise area lies on the southwestern coast, closest to downtown Abu Dhabi. This part of the island is encircled by the highway on the eastern side, cutting it off from the more private and residential Lagoons, Retreat and Reserve. Waterfront hotels and restaurants line the marinas, along with office and entertainment facilities organized on a strict grid. The Marina and Cultural Districts are the two most densely built areas on the island. Across the twelve-lane highway, villas sprawl in massive gated yards and luxury residences dot the landscape, accompanied by sparkling private pools.

But it is Saadiyat's pragmatically named Cultural District which makes this New Town so different from other resort cities in the Gulf. With its clear ambitions, the Cultural District is directly in line with the 'Strategic 2030 Plan for Abu Dhabi', which intends to transform the emirate into the tourism, art and cultural hub of the world. The island's 15,400 m<sup>2</sup> exhibition space, Manarat Al Saadiyat, opened in November 2009 with its strangely appropriate first display: *Disorientation II: The Rise and Fall of Arab Cities*.<sup>269</sup> Along the coastline, six soon-to-be iconic buildings rise from separate extensions jutting into the Arabian Gulf. Lord Foster is responsible for the Zayed National Museum, Frank Gehry for the 41, 411 m<sup>2</sup> Guggenheim Abu Dhabi, Zaha Hadid for the Performing Arts Centre, Tadao Ando for the Maritime Museum and Jean Nouvel for the 24,000 m<sup>2</sup> Louvre Abu Dhabi.

In 2007, former Guggenheim director Thomas Krens told *Newsweek* that the Guggenheim project on Saadiyat Island emerged from a happy meeting of mutual interests. "It was probably a kind of coincidence of two objectives—the objective of the Emirates and Sheik Mohammed, and the objectives of the Guggenheim, which over the last 50 years has clearly developed a strategy of international development. We have museums in Bilbao, Las Vegas, Berlin, New York. Our board has approved a strategic plan that calls out three areas in the world where we could be interested in doing something: the Middle East, Asia and Latin America."<sup>270</sup> After meeting with representatives from Qatar, Dubai, Bahrain and Kuwait, Abu Dhabi eventually emerged as the ideal site of the future Guggenheim. After going through Gensler's masterplan proposal, the Guggenheim signed an agreement to design the Cultural District in detail. According to Krens, "My driving concept was to create a critical mass that by definition would be—rather aggressively—the greatest concentration of contemporary cultural resources in the world."<sup>271</sup>

<sup>269</sup> The exhibition featured work by Kader Attia, Mona Hatoum, Marwan Rechmaoui and Diana Al Hadid, among others. A review of the exhibition by Abu Dhabi Art Press stated that "While the artists work with a wide range of media, from photography and video to installation and performance art, they all share a common sense of disillusionment and frustration over the course of political events that affect their lives." This is soon to be followed by an interactive exhibition called *The Saadiyat Story* which chronicles the development of the island from conception to construction. <http://www.abudhabiartfair.ae/en/Press/12.aspx>, retrieved on March 12, 2010.

<sup>270</sup> Krieger, Z., "I'm not a service company", *Newsweek*, August 6, 2007.

<sup>271</sup> *Ibid.*



**272** Astier, H., "Gulf Louvre Deal Riles French Art World", BBC News, March 6, 2007. <http://news.bbc.co.uk/2/hi/europe/6421205.stm>, retrieved on March 16, 2010.

**273** The Report: Abu Dhabi 2009. Oxford Business Group, Dubai, 2009, p. 138.

**274** Riding, A., "The Louvre's Art: Priceless. The Louvre's Name: Expensive", The New York Times, March 7, 2007. [http://www.nytimes.com/2007/03/07/arts/design/07louv.html?\\_r=1&oref=slogin](http://www.nytimes.com/2007/03/07/arts/design/07louv.html?_r=1&oref=slogin), retrieved on March 16, 2010.

**275** <http://users.flipbook.com.au/users/2008/4/tdic/#saadiyat-island>, retrieved on March 12, 2010.

**276** Ibid.

**277** Ibid.

**278** Ibid.

The construction of the new Louvre has caused the most controversy in the art world, with critics questioning the motives of the Louvre president and director Henri Loyrette. Protesters claimed Loyrette was auctioning off French culture to the highest bidder.<sup>272</sup> In March 2007 Abu Dhabi began talks with France to establish a 30-year cultural agreement that will allow the Musée du Louvre (as well as other national museums such as the Musée d'Orsay and Centre Georges Pompidou) to make long-term loans from their respective collections.<sup>273</sup> Both French Culture Minister Renaud Donnedieu de Vabres and Sheik Sultan bin Tahnoon Al Nahyan signed the agreement, giving Abu Dhabi the right to use the Louvre name in exchange for \$1.3 billion.<sup>274</sup>

In the Saadiyat Beach District, a mixed-use area on the northern coast of the island, each residential neighborhood will have a park, community facilities, a main village centre with a supermarket, restaurants and beauty salons. Individual neighborhoods will also have a barbecue area, gym, tennis court and 25-meter swimming pool. Inside the gated community, these facilities take on the role of the traditional courtyard. The sporting and leisure areas become a place for social interaction and exchange.

Unlike some contemporary New Towns in the Middle East, traditional Arabic influences are notably absent in the residential architecture. The so-called 'Mediterranean Villa', 'Arabian Villa' and 'Contemporary Villa' comprise the extent of aesthetic choice for housing in the Beach district. Designed by California-based architecture firm JZMK Partners, the villas make a departure from the traditional Arab courtyard (*sahn*) house with its centrally positioned pool (*howz*). In the 'Arabian Villa' there is notably less emphasis given to the privacy of the family and the separation of genders within the house. The typical flat roofscape is also absent, replaced by a gently sloping terracotta tile cross-hipped design. Plans for the 1127 m<sup>2</sup> 'Arabian Villa' feature two *majlis* (the traditional sitting room of the Arabic house) two kitchens, a gym, six bedrooms for family members, a five-car garage and four additional bedrooms for live-in servants. The interiors are decorated by the American design firm Creative Design Consultants. A four-bedroom villa sells for AED 6 million (\$1.6 million).

Saadiyat Promenade is billed as the island's "main family destination".<sup>275</sup> White sand beaches, boardwalks, seaside cafes and restaurants, hotels and shops encourage a "beach lifestyle".<sup>276</sup> Saadiyat Lagoons is more upscale, featuring private villas with individual jetties "in a secluded natural setting".<sup>277</sup> Saadiyat Retreat is an even more isolated area, located at the furthest tip of the island and including boutique hotels and private residences. Saadiyat Reserve features an eighteen-hole golf course surrounded by luxurious villas and a boutique eco-hotel.<sup>278</sup>

The American designers involved in the Saadiyat residential developments indicate the global ambitions of the project. The villas are designed to appeal to an international market. In contrast, the density of traditional domestic Gulf architecture was influenced by "the high value of

agricultural land, the limited supply of drinking water and the scarcity of space within the safety of the town... The courtyard house is not only very efficient in land use and climate control, but also preserves privacy under crowded conditions."<sup>279</sup> In Saadiyat Island, the brutal climate is offset with high-powered air conditioners, and with an influx of well-heeled foreigners, the social norms are gradually relaxing, reducing the need for gender-specific spaces.

The austere facades and meticulously decorated interiors generally associated with regional vernacular housing historically result from the introverted family social life.<sup>280</sup> In Saadiyat, this typology has been replaced by a vaguely Mediterranean style with stucco walls and Spanish roof tiles.

### It ain't all sunshine

The United Arab Emirates is an autocracy ruled by dynastic succession. Citizens have limited political power and constraints on the executive branch are nonexistent. Despite this, the current regime is stable and most Emiratis seem relatively pleased with the course their country has taken. Abu Dhabi has certainly prospered under the rule of Sheikh Khalifa bin Zayed Al Nahyan, and many Emiratis feel that it is thanks to his policies that the country now enjoys such a high standard of living. Like any family-run kingdom, the emirate faces the occasional domestic embarrassment, but these tend to be swiftly dealt with and protected from state-owned media. As in other oil-rich authoritarian states, the citizens of the UAE appear to have exchanged a role in the democratic process for oil profits, no taxes and strong welfare. So far this exchange has worked in their favor.

But Abu Dhabi's global reputation is still one of opulent wealth mixed with conservative social norms. In fact, the rise of the resort city in the Gulf has been something of a marvel. Much like earlier precedents along the Mediterranean coast, the major tourist destinations are not embedded in the social and cultural fabric of daily life; but rather eclectic collections of leisure facilities catering to wealthy clientele.<sup>281</sup>

Dr. Christian Steiner, Project Coordinator for the Center for Research on the Arab World (CERAW), has argued that developments like Saadiyat Island act as 'symbolic capital' in the sense that they "can be defined as the sum of cultural and social recognition, which individuals and groups accumulate through the exploitation of social symbolisms of distinction,

**279** Ragette, F., Traditional Domestic Architecture of the Arab Region, American



Developed by Abu Dhabi National Hotels (ADNH), The Park Hyatt Abu Dhabi Hotel is currently under construction next to the Saadiyat Island Golf Course. The hotel will have 270 guest rooms, and fifteen private villas, 2010.

University of Sharjah, 2003, p. 60.

**280** Michell, G. (ed), Architecture of the Islamic World: Its History and Social Meaning, Thames and Hudson, London, 1978, p. 184.

**281** Which is not to say that the government has overlooked Westerners' preoccupation with spoon-fed culture; indeed, there are plans for a massive new 'central market' which will house a re-created souk, built on the site of an ancient souk, which uses the words 'exotic' and 'authentic' in the developer's brochure, despite the fact that this is clearly a mall shrouded in wood latticework mashrabiyas. There are also plans to renovate the city center, and the old fort at Al Ain has recently been restored.





Visitors explore a large-scale model of Gehry's proposal for the new Guggenheim, 2010.

**282** Steiner, C., "From Heritage to Hyperreality? Prospects for Tourism Development in the Middle East between Petra and the Palm", May 2009.

**283** Ibid.

**284** From the press release "Advanced Construction Village on Saadiyat Island Nears Completion" by the United Arab Emirates, originally posted on February 14, 2009. <http://www.ameinfo.com/184792.html>, retrieved on March 12, 2010.

and as the means of social and cultural recognition. [This] accumulation of symbolic capital is a necessary means to succeed in the (global) competition for recognition and prestige."<sup>282</sup> Steiner goes on to point out the political value and implications of symbolic capital, which is "a crucial source of power because it legitimizes and enhances the socio-political position of its owner."<sup>283</sup> This self-supporting system is apparent in Abu Dhabi's development of Saadiyat Island. By combining world-class museums and education facilities, Abu Dhabi becomes associated with high art and cultural awareness. Over time, these associations may overcome the emirate's current reputation as a place of petrodollars and playboys. What better way to convey a favorable political image than through the acquisition and exhibition of world-class artworks?

### It takes a village

Building a city for 160,000 inhabitants requires massive amounts of labor, and in the case of Saadiyat Island, that means an entire construction village of 40,000 foreign workers. Thus the New Town starts with a temporary town, one that will be erased as the island nears completion. The first phase of the construction village cost TDIC "Dhs 950 million (\$258 million) and includes halls of residence, dining areas catering to a multitude of ethnic tastes, sports and leisure amenities, shops, Internet booths, recreational parks and laundry facilities."<sup>284</sup> TDIC CEO Lee Tabler describes the area: "The construction village is situated on the beach to the south of

the island and has extensive landscaped areas with parks, tennis courts, basketball courts and a cricket pitch. One of the core rationales behind the decision for the village is to foster a sense of home and community for the workers on the island."<sup>285</sup> The village is designed by Singapore's Surbana Corporation Pte Ltd.

In spite of the ethnic food and basketball courts, Human Rights Watch has questioned the quality of life for the imported workers. In an 80-page report published in May 2009, the watchdog group addressed issues including employee-incurred recruiting fees (which burden workers with years of debt to pay off), visas controlled by employers (effectively stranding the workers), relatively low wages, restrictions on self-organization and "no real access to legal remedies."<sup>286</sup> HRW also accused employers of paying less than the promised salaries. Dr. Anwar Mohammad Gargash, the UAE Minister of State for Foreign Affairs, responded to the critique by pointing out that HRW had failed to mention the country's consistent progress in improving employment standards and workers' rights. Dr. Gargash said, "The UAE is surprised and disappointed by HRW's attempts to sensationalize the drawbacks in the country's labor policies into media sound bites, without consideration of the rapid strides that have been made over the past few years... While the government is open to constructive criticism on the scope and pace of its efforts to extend protection to workers under the law, the report's arbitrary generalizations and minute research sampling do not withstand scrutiny and cast a cloud on the credibility of the entire report."<sup>287</sup>

As of March 2010, there were more than 20,000 workers engaged in the construction of Saadiyat Island, with plans to accommodate another 25,000. All of the construction workers in the labor camps are male, and legally prohibited from bringing their families into the UAE.<sup>288</sup> The national government, however, has been responsive to the critique, and the new Wages Protection System (WPS), launched by the Ministry of Labor in 2009, now forces companies to pay their workers through a bank system rather than in cash. This allows the Central Bank and Ministry of Labor to track salary payments in real time, and avoid some salary disputes.<sup>289</sup>

The majority of the workers originate from India, Pakistan and Bangladesh, with others coming from Sri Lanka, Nepal, Thailand and the Philippines. In fact, almost 90% of the UAE's private workforce is made up of foreigners. In 2008, the average monthly income for an Emirati family in Abu Dhabi was AED 47,066 (\$12,813). Comparatively, the average monthly income for expat families was AED 15,000 (\$4000), while foreign construction workers earn between 500 – 1500 AED (\$136 - \$400) monthly.<sup>290</sup>

**285** Ibid.

**286** "The Island of Happiness": Exploitation of Migrant Workers on Saadiyat Island, Abu Dhabi, Human Rights Watch, New York, 2009, p. 1.

**287** "UAE rebuffs Human Rights Watch report on Saadiyat Island", Gulf News, May 19, 2009.

**288** According to the Council of Ministers Order No. 4 (1994) Article 1: "The following groups but not others shall be allowed to bring their families: Engineers, Doctors, pharmacists and nurses, Agricultural guides, Qualified accounts and auditors, The education members in universities and high educational institutions and teachers, Officers in the army forces and police, The technicians working with scientific electronic instruments and in laboratories, Advocates and Lawmen, The employees in oil companies, The qualified managers, the businessmen who are partners in the companies with limited liability provided that the partners portion is not less than



Construction workers make headway on the 15,000 m<sup>2</sup> Manarat Al Saadiyat exhibition space, 2010.

the third or seventy thousand Dirhams as a minimum, and it shall be possible to add or omit from these groups with an order from the Council of Ministers in order to achieve the general welfare, and professions of these groups shall be identified in pursuance of the confirmed work card and contract." Article 2 states:



"The salary of the persons permitted to bring their families shall not be less than Four thousand Dirhams if the employing party provides them with an accommodation and Five thousand if the employing party doesn't provide them with an accommodation." The full legislation can be found online at <http://www.mol.gov.ae/controlpanel/Attachments/28092008/WorkPermits-EN.htm#a>. In June 2009, the UAE base salary for construction workers was increased by 150% from 1000 Dirhams per month to 1500 Dirhams per month, a raise which still leaves the average worker legally (and financially) unable to have his family join him. See <http://english.vovnews.vn/Home/UAE-increases-base-salary-for-construction-workers-by-150-percent/20096/104990.vov>, retrieved on March 15, 2010.

**289** Absal, R., "UAE Government Launches Wages Protection System for Workers" *Gulfnews.com*, May 26, 2009. <http://gulfnews.com/news/gulf/uae/employment/uae-government-launches-wage-protection-system-for-workers-1.69869>, retrieved on March 15, 2010.

**290** Namatalla, A., "Average Emirati household income in Abu Dhabi is Dh47,066" *Gulfnews.com*, July 7, 2009. <http://gulfnews.com/business/general/average-emirati-household-income-in-abu-dhabi-is-dh47-066-1.500420>, retrieved on June 27, 2010.

**291** The young couple was jailed and deported in March 2010 after breaking Dubai's morality laws by kissing in public. British papers called the ruling 'draconian'. Parker, N., "Kiss and Cell", *The Sun*, March 13, 2010.

**292** Salama, V., "Dubai's Debt Blues Drowned Out by Chopin, Marsalis in Abu Dhabi" *www.blomberg.com*, March 27, 2010.

<http://saadiyat island.eu/press/383/dubai-s-debt-blues-drowned-out-by-chopin-marsalis-in-abu-dhabi>, retrieved on June 28, 2010.

**293** Krieger, Z., "I'm not a service company", *Newsweek*, August 6, 2007.

## Lady Madonna

The new focus on tourism will bring ample opportunities for employment across the economic spectrum. For Abu Dhabi's relatively youthful population (the median age is 30), this means careers instead of just governmental handouts. Abu Dhabi's investment in the arts is already changing the face of the country. The WOMAD Festival (World of Music, Arts and Dance) and the Abu Dhabi Festival (now in its seventh year) both find a growing audience in Abu Dhabi. But some observers have doubts about this conservative country's ability to combine the nonconformity of the art world with Islamic values. Western art critics questioned whether the new Louvre would exhibit nudes (yes, it turns out), and after a British couple was jailed for kissing on Dubai's beach, some would-be tourists are skeptical about possible social misunderstandings.<sup>291</sup> According to Christopher Davidson, a professor of Middle East studies at Durham University, "Censorship is one of the issues these museums and artists are worried about. Being able to accept any Web site, read any newspaper, display any book, display nude art, display Israeli or Jewish art, homosexual references in art—I don't think Abu Dhabi is there yet."<sup>292</sup>

But Thomas Krens disagrees. In a 2007 interview with *Newsweek*, Krens explained, "I don't think censorship is an issue. Being sensitive to local tradition is not problematic from my standpoint. I don't see it as something negative that defines this project... That doesn't mean there won't be individual situations where sensitive discretion will be exercised, but we are hardly going to begin a program thinking of ways we can upset the balance of the local situation. And looking at contemporary art across the board, 99% of it is not going to be problem."<sup>293</sup> Locals also dismiss the implications: Mubarak Al-Muhairi, deputy chairman of ADTA, reassured critics that the new museums would not summarily reject loans from France that depicted, for instance, nudity or Christian references. "In principle, there are no restrictions," he said, "but both sides will agree on what is shown."<sup>294</sup>

Abu Dhabi Art 2010 provided a sort of litmus test for local collectors' taste. Organized by TDIC and the Abu Dhabi Authority for Culture and Heritage, the event included various exhibitions, an art fair, workshops and debates. The festival featured some of the most significant Middle Eastern art of the last 80 years, as well as works from Giacometti, Ruscha, Serra, Twombly and Warhol. According to a press release from TDIC, "Abu Dhabi Art symbolizes Abu Dhabi's active role in influencing the cultural field, inspiring debate and experimentation in the arts, thereby changing the nature of art in the Middle East and the world. A diverse program reflects and translates these ambitions into something truly unique for the public to experience. This is most clearly evidenced by the immense development of the Saadiyat Cultural District."<sup>295</sup>

## Sustainability is a marketing tool

Amidst the plans for luxury villas and extravagant cultural facilities, there are scattered claims of an overriding dedication to sustainable

development. According to the Urban Planning Council's website, Abu Dhabi's *Plan 2030* "is establishing a clear vision for sustainability as the foundation of any new development occurring in the Emirate and capital city of Abu Dhabi. This commitment is a reflection of the values and ideals of our nation. They are derived from a thoughtful awareness of relevant economic conditions and influences. Our long term sustainable vision is designed to manage the complexity of our city's various autonomous systems through a mechanism of visionary governance and overall coordination."<sup>296</sup> It is a commitment to sustainability (engaging social and economic, as well as environmental factors) in its broadest terms, then, that drives Abu Dhabi's plans for the future.



Downtown Abu Dhabi is characterized by squat towers in muted colors along the main roads, with massive parking lots on every corner; testament to the city's ongoing love affair with the car.

From a purely environmental perspective, protected mangrove forests and a new mangrove nursery are the clearest physical indicators of this pledge. In the Wetlands District, TDIC has planted 280,000 mangrove saplings in an effort to counteract erosion along the shoreline. TDIC CEO Lee Tabler explained: "The ecological importance of mangroves is substantial as they act as something of an enviro-engine, being a breeding and migratory habitat for a wide range of species... As mangrove sediment is rich in life, wading birds feed there, and juvenile fish find food and shelter

**294** Riding, A., "The Louvre's Art: Priceless. The Louvre's Name: Expensive", *The New York Times*, March 7, 2007. <http://www.nytimes.com/2007/03/07/arts/design/07louv.html>, retrieved on June 28, 2010.

**295** "Opening release: Abu Dhabi Art 2010", TDIC press release, November 3, 2010.

**296** <http://www.upc.gov.ae/en/SustainableUrbanDesign/>

[SustainableUrbanDesigns.aspx](http://www.sustainableurbandesigns.aspx), retrieved on March 16, 2010.



**297** TDIC press release from June 15, 2008. <http://www.ameinfo.com/160293.html>, retrieved on March 16, 2010.

**298** Kwong, M., "Gehry's Golfhouse on Saadiyat to Mimic a Khandoura"

The National, January 27, 2010.

<http://www.thenational.ae/apps/pbcs.dll/article?AID=/20100128/NATIONAL/701279855/1010>, retrieved on

March 16, 2010.

March 16, 2010.

in and around the roots. The health of Saadiyat's coastline owes much to the existence of lush mangrove plantations.<sup>297</sup> Somewhat ironically, existing mangroves were first removed in bulk, before being replanted in line with the masterplan.

In addition to mangroves, the eighteen-hole golf course and clubhouse were also given careful attention. Saadiyat marketing literature claims that all employees of the development understand the island's environmental ambitions. During a bumpy ride over the golf course, however, a golf instructor claimed there was 'nothing' environmental about the terrain. In fact, there are three freshwater lakes that face such drastic evaporation that two trucks are brought in each morning to refill the ponds with water. (While we cruised around the fairways course employees were also busy using leaf blowers to remove the sand from the greens—a seemingly futile effort.)

Abu Dhabi-based newspaper *The National* reported in early 2010 that the golf course's clubhouse was conceptualized to "put a postmodern twist on the traditional garb worn by Arab men." Gehry himself went on to elaborate during a slide presentation: "The *khandoura* that the gentlemen wear—the white clothes—we're thinking of this as [evoking] a kind of oasis or mirage in the green... It's going to have a floating quality. It has all the functional requirements of a building, but it feels ephemeral."<sup>298</sup> Gehry's sprawling 18,000 m<sup>2</sup> clubhouse was also designed to meet Estidama standards. Estidama (Arabic for 'sustainability') is an initiative of The Abu Dhabi Urban Planning Council, in association with the Environmental Agency and Abu Dhabi Municipality. The collaboration was launched in 2008 and includes a series of sustainable building and community guidelines specifically calibrated to the social and environmental factors of the Gulf region. This set of guidelines is known as the *Pearls Design System*, with each 'pearl' indicating a greater level of sustainability. At the time of writing it was unclear how many 'pearls' Mr. Gehry's clubhouse merits.

The Estidama website declares that it is not a ratings system (such as LEED or BREEAM, for example), but rather "an aspiration... We envision that Estidama, when fully expressed across our society, will touch multiple facets of our daily life—the curriculum in our children's schools, the way the sovereign wealth fund makes investment decisions, the way infrastructure is planned, calculated and constructed, the health of our land and marine ecosystems, and sustainable sourcing of food and water."<sup>299</sup> Again, the implication is that Abu Dhabi's Planning Council strives for sustainability as an all-encompassing concept rather than just environmental indicators. But Saadiyat Island may prove to be a missed opportunity for the emirate to have integrated more sustainable infrastructure and technology. It seems Abu Dhabi doesn't really think opulence and environmental awareness mix. With an abundance of seven-car garages, Saadiyat is a far cry from the automobile-free plans for Masdar City. Abu Dhabi has apparently given its New Towns strict roles: Saadiyat will be the luxury and cultural hub, while Masdar will play the eco-conscious neighbor.

## Slow and steady

Inflation has continued to be an issue for Abu Dhabi, and indeed for all the Gulf states. With the heady growth rates of the 2000s, some inflation was to be expected, but the problems have been exacerbated by the fact that the dirham is pegged to the US dollar.<sup>300</sup> As the dollar value sank in 2009, imports from European and Asian markets became increasingly expensive. Abu Dhabi, however, is still better equipped to handle fluctuation than some of its neighbors. The emirate holds more than 9% of the world's known oil reserves (98.2 billion barrels) and almost 5% of the world's natural gas (5.8 trillion m<sup>3</sup>).<sup>301</sup> These concentrations make Abu Dhabi a powerful player in both diplomatic and economic circles. As a member of OPEC, the emirate also wields significant influence over the international price of oil.

Remarkably, non-oil and gas GDP now constitutes 64% of the UAE's total GDP. This is an intentional result of Abu Dhabi's carefully managed and substantial investments in industry, real estate, tourism and retail. As part of the continued strategy to diversify the economy, Saadiyat will create jobs and add value to the region. As a new center for art and education, the island will also encourage innovation and push the emirate towards more knowledge based sectors.

With a price tag of \$27 billion, Saadiyat represents the country's largest single investment to date. Publicity for the project has been so strong that even with the effects of the global economic crisis, TDIC claims there will not be any significant delays or cutbacks.<sup>302</sup> The first batch of apartments go on sale in the second quarter of 2011. Their sales performance will be an indication of the project's future. If all goes according to plan, Abu Dhabi may join the ranks of cultural hotspots like Paris and London; instead of the 'Bilbao effect', future discussions may debate the 'Saadiyat effect'.

**299** [http://www.estidama.org/talktous/Default\\_en\\_gb.aspx](http://www.estidama.org/talktous/Default_en_gb.aspx), retrieved on March 15, 2010.

**300** Cleveland, W.L. and Bunton, M., *A History of the Modern Middle East* (4th edition), Westview Press, Boulder, 2009, p. 551.

**301** <http://www.oxfordbusinessgroup.com/country.asp?country=36>, retrieved on March 16, 2010.

**302** Hoath, N., "No delays on any of our 55 projects: TDIC" *Emirates Business* 24/7, April 20, 2010. <http://www.business24-7.ae/companies-markets/real-estate/no-delays-on-any-of-our-55-projects-tdic-2010-04-20-1.137070>, retrieved June 28, 2010.



Expected residents:  
160,000

Date:  
2004-2020

Status:  
Under construction

Cost:  
\$27 billion

Location:  
24°32'8.81"N, 54°26'32.7"E

Designers:  
Masterplan Team led by  
Gensler, with Buro Happold

# Saadiyat Island

## United Arab Emirates

Arabian Gulf

SAADIYAT ISLAND

Mina Zayed Port

Yas Island

Abu Dhabi International Airport

CBD

Abu Dhabi

Khalifa City

Masdar City

water

built area

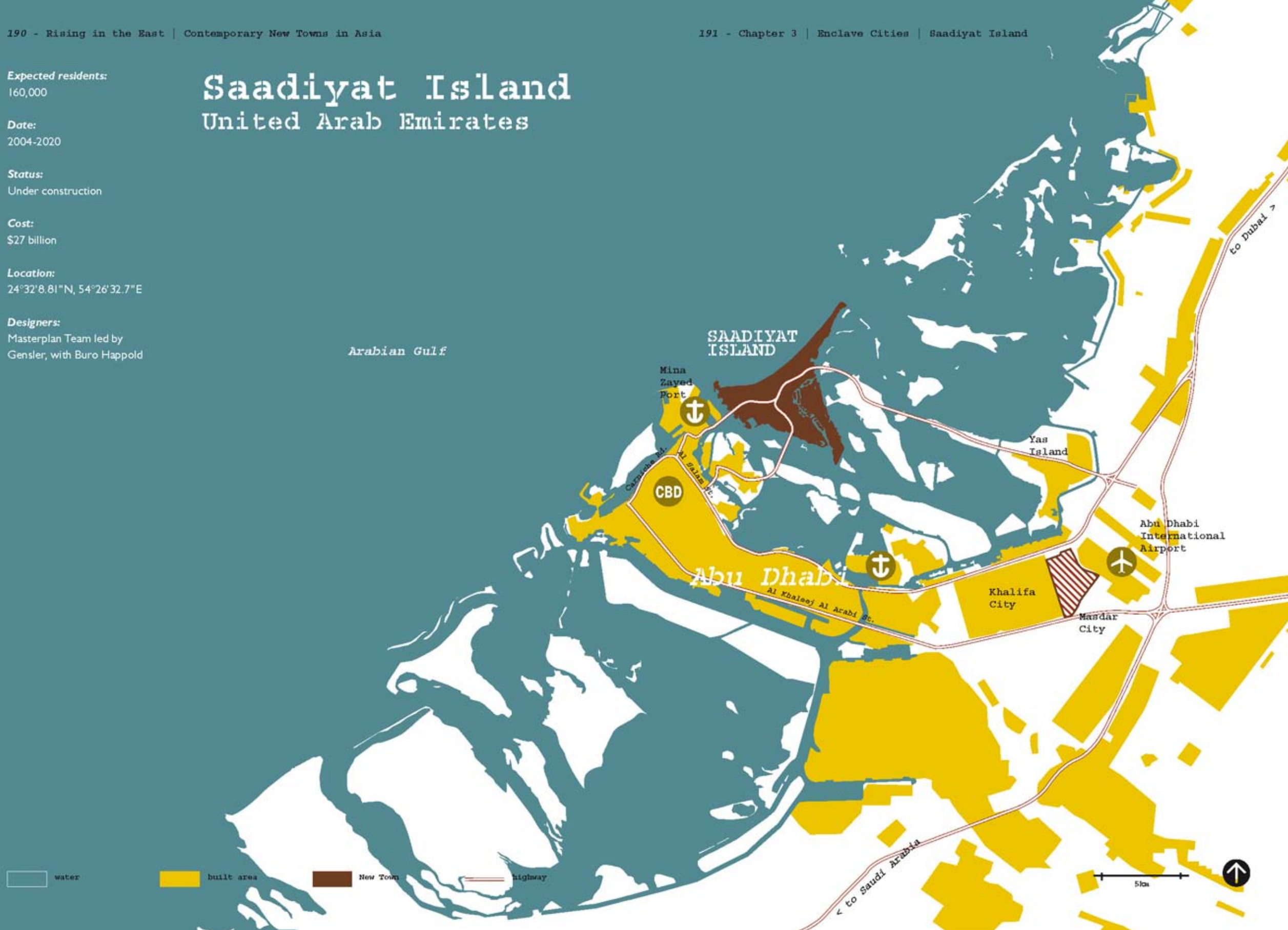
New Town

highway

50m

< to Saudi Arabia

> to Dubai







2010년 7월 콘도미니엄 준공 예정

임대청약 개시!!

- 가구집기 완비
- 무료 인터넷
- 다양한 룸 타입

유니트 타입	부대시설
2 베드(30평형)	클럽하우스, 피트니스센터
3 베드(39평형)	카페테리아, 수영장
4 베드(58평형)	유아방, 놀이터, 도서관



- 캄코시티 내 주요 유치시설
- 광역개발구역(FDD)
  - 캄보디아 증권거래소
  - 업무시설
  - 컨벤션 센터
  - 쇼핑몰
  - 국제학교
  - 종합병원
  - IT 대학 및 의과대학
  - 발전소 및 통신인프라 구축

세부사항은 모델하우스 및 부동산사무실을 방문하여 주시기 바랍니다. (9:00 AM ~ 5:00 PM)

### The Korean consequence

CamKo City is a comparatively small New Town, but it is being marketed as a 'world-class' urban environment with technologies such as a reliable water supply, stable electrical system, high-speed telecommunications lines and electronic security systems—amenities that are largely unavailable in Cambodia. While Phnom Penh slowly decays, CamKo is presented as a clean, modern alternative for the capital's financial and political elite. Located just on the outskirts of northern Phnom Penh, in the Russei Kaew District, the 119 ha development is the municipality's test case for a series of upcoming satellite city projects.<sup>303</sup> If all goes according to plan, CamKo should house 35,000 people by 2018. But is it a New Town? Technically, CamKo does not have an autonomous local government—in fact, Phnom Penh City Hall will be moved to the center of this development. CamKo's position on the edge of an existing metropolis might also invite doubt as to its New Town status. The development is, however, planned and constructed from a single masterplan, and envisioned as a semi-autonomous enclave.

CamKo—like its name—represents a unique merging of two countries. Geographically, Cambodia is home to the New Town, and the development has the blessing of both local and national governments. Financially, however, CamKo is the largest single foreign investment made to date. The New Town is funded by Korean investors, and built with the expertise (and materials) of Korean construction companies.<sup>304</sup> South Korea's intimate relationship with Cambodia has improved rapidly since the two countries restored diplomatic ties in 1997. During the late 1990s, Koreans invested heavily in Cambodia's garment production, helping the country develop the industry that now accounts for 80% of Cambodia's export economy. When the global economic crisis began in 2008, however, luxury clothing brands were the first to suffer.<sup>305</sup> Today, much of Korea's contributions come in the form of massive development aid donations, as well as expert consultants and volunteers. In turn, Cambodian nationals are invited to visit Korea for traineeships. As part of the special relationship, Korean goods imported into Cambodia for 'official development' purposes are not subject to import taxes.<sup>306</sup> In 2010, South Korea overtook China to become the kingdom's single largest foreign investor.<sup>307</sup> In fact, Korean influence has become so strong that young Cambodians learn the Korean language in order to be able to do business with visiting businessmen and women. In 2007, the Royal University of Phnom Penh opened its own Korean Department to cater to the growing interest in *Hanguk* culture. In early 2010, the Cambodian government even went so far as to outlaw marriage between Cambodian women and South Korean men, citing fears of human trafficking and exploitation.<sup>308</sup> While there are currently only about 5,000 Koreans living in Cambodia full-time, almost 250,000 Koreans visit the kingdom each year.<sup>309</sup> In light of this clear national interest, the South Korean government invested more than \$265 million in the kingdom between 2001 and 2009, and in 2010 this investment skyrocketed to \$1 billion.<sup>310</sup> Despite setbacks and delays caused by the economic crisis, Korean investors appear poised to capitalize on the boom they helped create.

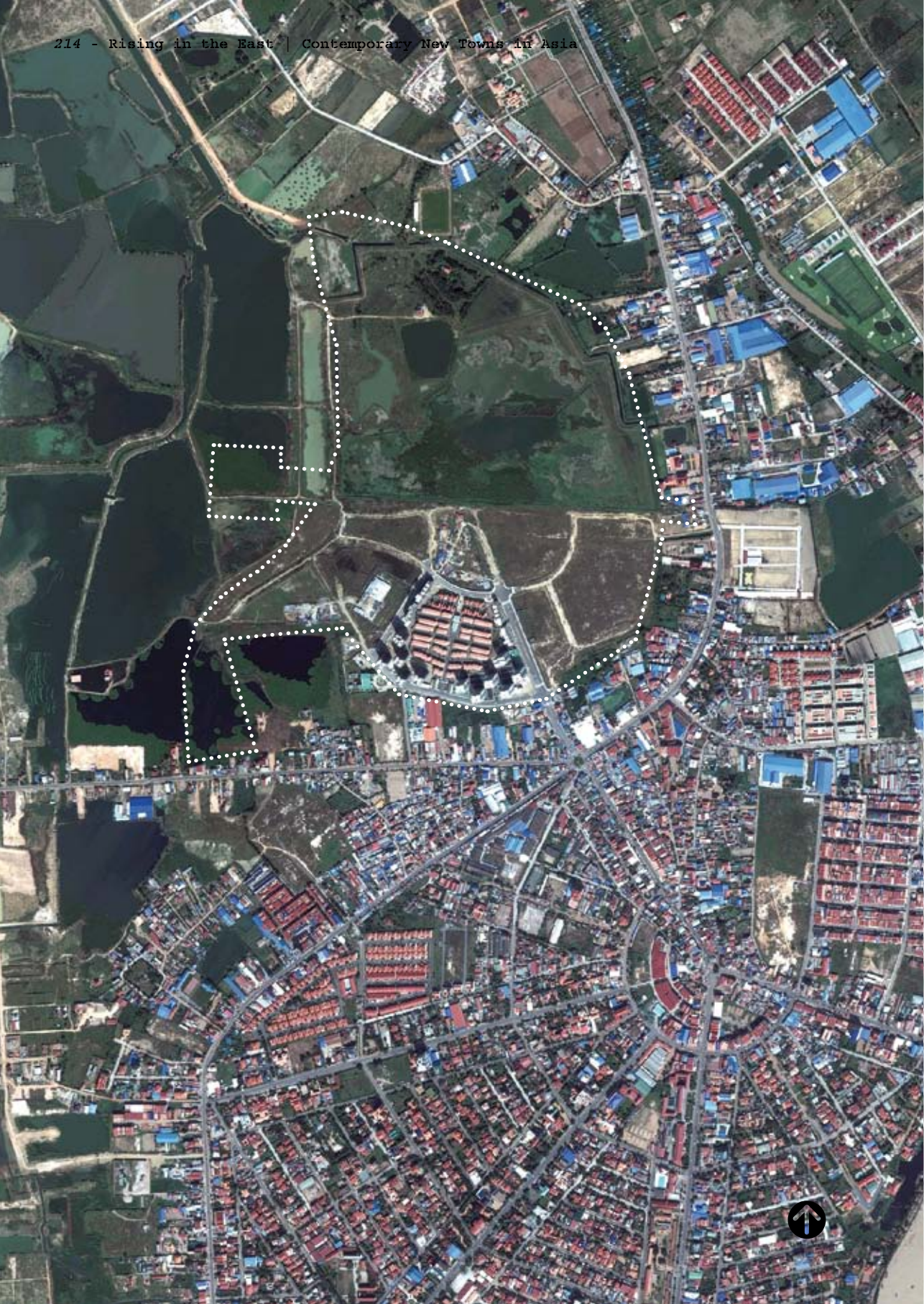
**303** Some of the upcoming projects include Grand Phnom Penh International City, a \$600 million development north of CamKo City; Diamond Island, a \$300 million project on the shores of the Mekong River, and the Beoeng Kak Lake development, a \$1.5 billion residential project on a former lake in the center of Phnom Penh.

**304** The city will also be home to the kingdom's new stock exchange (CSX), as well as a planned financial development district. All of which will be built and funded by Koreans, from the asphalt roads to training courses for CSX employees.

**305** As a result, "textile exports to the US and Europe, the country's main markets, fell by 23% in 2009. More than 90 factories closed (many owned by Chinese or Taiwanese operators), laying off about 60,000 workers out of a total of 345,000 in the trade. Conditions in the first half of 2010 have improved, with a 7% increase in exports, but business is still far below its level three years ago." Without alternative industries to compensate, Cambodia's GDP growth rate sank from 5% in 2008 to -1.5% in 2009. In 2004, Cambodia officially joined the World Trade Organization (WTO), further strengthening international ties, and in January 2010, the long-awaited China-ASEAN Free Trade Area became a reality, easing restrictions on trade between the eleven countries. The natural gas and oil reserves discovered in Cambodian waters in 2005 may present a chance to jump-start the national economy. Commercial extraction is set to begin in 2011. See: Beaugé, F., "Cambodia garment workers strike for minimum wage hike", *Guardian Weekly*, September 21, 2010.

**306** Korea's support of infrastructure and real estate projects has fueled a real estate boom in the kingdom. In 2007 alone, land prices in Phnom Penh rose 50-80%, largely due to Korean investment. "Korean entrepreneurs have also been actively involved in various business activities in Cambodia. Two-way trade has increased sixfold since the two





- office
- convention center
- government complex
- medical center
- hotel
- high-rise condominium
- mid-rise condominium
- town house
- retail
- mixed use
- public school / technical college / international school

200m





countries re-established diplomatic ties in 1997, reaching 300 million US dollars in December 2009. Korea is also the second largest foreign direct investor in Cambodia, with a cumulative total of 2.9 billion US dollars in investment.” “Greetings”, from South Korean Ambassador Chang Ho-jin, November 12, 2010. <http://khm.mofat.go.kr/eng/as/khm/mission/greetings/index.jsp>, retrieved on November 24, 2010. See also: Kear, P., “Cambodia enjoying real estate boom”, *Kyodo News*, February 1, 2008. See also: Myo-ja, S., “Korea, Cambodia to cooperate on new projects”, *Korea JoongAng Daily*, June 5, 2009.

**307** “Cambodia Says Investment Approvals Halved in 2010”, *Reuters*, January 13, 2011.

**308** “The number of Cambodian women marrying South Korean men has risen steadily in recent years. In 2004 just 72 marriage licenses were issued, but by 2007 the number had rocketed to more than 1,700.” In 2009, 1,400 licenses were issued to Cambodian women, causing the government to question the situation and ultimately ban the marriages in April 2010. See: Carmichael, R., “Phnom Penh Bans Marriages between Cambodian women and South Korean men”, *Voice of America Cambodia (VOA)*, April 1, 2010.

**309** Direct flights between the two countries have contributed to the exchange of peoples. There are currently about 10,000 Cambodians living in Korea. See: “Greetings”, from South Korean Ambassador Chang Ho-jin, November 12, 2010. <http://khm.mofat.go.kr/eng/as/khm/mission/greetings/index.jsp>, retrieved on November 24, 2010.

**310** “The Republic of Korea has provided Cambodia, one of its major partner countries for development cooperation, with its soft loans (EDCF: Economic Development Cooperation Fund) and grant aid amounting to 250 million US dollars and 53 million US dollars, respectively. Korea’s development cooperation is expected to expand further in line with its accession to the OECD

## The charming city

Although Phnom Penh is now a bustling metropolis, the city was completely emptied for almost five years during the reign of Saloth Sar (better known by his *nom de guerre*, Pol Pot). Phnom Penh fell to the Khmer Rouge on April 17, 1975. Just days later the city was a ghost town: more than two million citizens had been forcibly removed to the surrounding rural areas. Millions of Cambodians were sent out of the cities into labor camps and ‘utopian’ agrarian villages under Khmer Rouge control.<sup>311</sup> The mass displacement shifted the population to the extent that even today most Cambodians do not live in areas that have ancestral significance for them.<sup>312</sup> For the period between 1975 and 1979, estimates put the genocide totals between 1.3 and 2 million. After the Khmer Rouge was subdued by the Vietnamese army in early 1979, people began to trickle back into the abandoned capital.



Phnom Penh looking east from the central roundabout towards Beoung Kak Lake, 2011.

From 1979 until 1989, Cambodia was led by a Vietnamese-backed government, with support from the USSR. Russian, rather than French, was taught in schools. Peace efforts began in 1989, resulting in a cease-fire two years later. When a multi-party democracy was restored in 1993, current Prime Minister Hun Sen shared the position with Prince Norodom Ranariddh. After a short military conflict in July 1997, the leadership structure was reorganized and Hun Sen became sole prime minister in 1998. For the last seventeen years, he has served as head of government while King Norodom Sihamoni (Prince Norodom Ranariddh’s half-brother) is now head of state.

Today, Phnom Penh once again houses more than two million inhabitants. But one result of the Khmer Rouge ‘purges’ is that today’s population is very young. The death of 15% of Cambodia’s total population during the five years of Khmer Rouge rule has warped the country’s demographics: according to a 2010 estimate, the median age is just 22.<sup>313</sup> Low education levels and a lack of productive skills (especially in the rural areas) have

compounded the problem. Many people attribute these developmental issues to the Khmer Rouge’s forced agricultural communism. And while the execution of two million intellectuals and artists has obviously retarded Cambodia’s development, it would be naïve to assume that the country did not face corruption problems and poverty well before Pol Pot’s terror began.<sup>314</sup> Today, 30 years after the Khmer Rouge, 50% of the population remains illiterate, and the nation of 14 million suffers from poverty, inadequate health care, poor education, rampant corruption and a lack of basic infrastructure.

## Growing trade

In spite of these complications, thousands of the children and young adults who fled Pol Pot’s reign of terror have now returned to their country, ready to invest entrepreneurial and technical skills in Cambodia’s emerging economy. This influx of skilled workers helped Cambodia’s economy grow by about 10% annually between 2000 and 2007. In fact, Cambodia’s growth was second only to China during these boom years. As money poured in, political stability under Hun Sen’s administration helped drive investment and attract foreign interest.<sup>315</sup>

In the past few years, increased tourism, trade and garment exports have buoyed the fledgling economy. Foreign direct investment has grown steadily since the 1994 Foreign Investment Law guaranteed that investors would not be treated in a discriminatory manner (aside from land ownership regulations) and as a result, foreign investment rose to a record-breaking \$4.4 billion in 2006, according to the Cambodian Investment Board. In contrast to China and Vietnam, foreigners can own 100% of a company, and there are no restrictions on money brought in or out of the country. Cambodia joined the World Trade Organization (WTO) in 2004, signed various trade agreements, and in 2010 the long-awaited China-ASEAN Free Trade Area finally became a reality, easing restrictions on trade among the eleven signatory countries. Despite these reforms, the country continues to face international pressure to clean up corruption and improve the business climate. The World Bank’s *Doing Business Report 2011* ranks Cambodia 147th out of 183 economies for ease of doing business.<sup>316</sup> Corruption is so widespread, even educational institutions are vulnerable to bribery. In many cases, a passing or failing grade more often corresponds with who has paid the teacher off, rather than who has actually earned a good mark.

In an effort to clean up the government’s reputation for vice, Parliament began drafting an anti-corruption law in 1994. In 2010, sixteen years after it was introduced, the law was finally passed—despite a walk-out protest by the opposition party and a call for further discussion from the

Development Assistance Committee. The expansion will come as part of Korea’s New Asia Initiative promoting an ‘Amicable Neighborhood Policy’ and its vision of a Global Korea.” See: “Greetings”, From South Korean Ambassador Chang Ho-jin, November 12, 2010. <http://khm.mofat.go.kr/eng/as/khm/mission/greetings/index.jsp>, retrieved on November 24, 2010. See also: “South Korea to increase aid, investment for Cambodia”, *China Daily (Xinhua)*, January 14, 2010. Cambodia is currently the highest per capita recipient of foreign aid. According to a study by the Brookings Institute, foreign aid over the last decade has totalled \$5.5 billion. See: ‘Aid Effectiveness in Cambodia’, Wolfensohn Center for Development Working Papers No. 7. The Brookings Institution, December 2008.



A typical scene at the Phnom Penh market, 2011.

**311** It is simplistic to describe the Khmer Rouge policy in these terms, but the intentions and methods of the Khmer Rouge lie beyond the scope of this book.



The iconic central market (Psar Thmei) in downtown Phnom Penh was built in 1937, while Cambodia was still under French colonial rule, 2010.



United Nations. It remains to be seen whether the law will actually curb corruption or, as the opposing Sam Rainsy Party claims, “this is a law that will foster corruption, not punish it.”<sup>317</sup>

### New Khmer style

Phnom Penh’s current cityscape is a mix of post-modern and French Colonial architecture. The French occupied Cambodia for nearly a century, between 1863 and 1953. When the French colonists began re-imagining Phnom Penh’s urban fabric in the 1890s, one of the major goals was a segregation of communities based on ethnicity (and congruently, social ranking). The resulting *quartiers* divided the city between the ward for native *Cambodgienne*, a *quartier Annamite* (Vietnamese), a *quartier Chinoise* (Chinese) and a *quartier Européen* (European). In what could easily be interpreted as a precedent for the enclave-style CamKo City, a canal fully encircled the *quartier Européen*. Town planner Daniel Fabré led the reconstruction until his death in 1904. During the 1920s, urban planning was once again on the political agenda. This time, French planner Ernest Hébrard drew up the plan to combat Phnom Penh’s spreading urbanization. Much of the Beaux-Arts influence that can be read in the city fabric today is a result of his design. Neoclassical French-style buildings and wide boulevards originating from a central circular core characterize the Phnom Penh of this period.<sup>318</sup>

After gaining independence from France in 1953, Cambodia entered a phase of dynamic cultural and economic development. From the early 1950s until 1970, Prince Norodom Sihanouk led the country towards prosperity and modernization. As a symbol of the renewed national pride following independence, the Prince supported the development of ‘New Khmer Architecture’, a style that incorporated traditional vernaculars as well as European elements. High construction standards and bold architectural designs were testament to the country’s newfound self-confidence. Among the many noteworthy Cambodian designers to come out of this period, Vann Molyvann is perhaps the most famous. A student of Le Corbusier, Molyvann’s projects include almost one hundred buildings (designed and constructed in just fifteen years), as well as the design of various New Towns.<sup>319</sup> Before sustainability became a keyword for developers, Molyvann promoted the use of local materials and passive cooling in Cambodia’s tropical climate. Double roofs, influenced

One may, however, recall a revealing quote from Pol Pot’s now infamous speech to a group of Yugoslavian journalists in 1978: “We are building socialism without a



The Phnom Penh Teacher Training College designed by Vann Molyvann, completed in 1972.



Molyvann’s Olympic Stadium at Phnom Penh was designed in 1963 to host the Southeast Asian Peninsular Games. The Games were cancelled due to political unrest in Cambodia, and the stadium was used by squatters (seen here in 2002) until it was bought and redeveloped by the Yuanta Group (Taiwan).

model. We do not wish to copy anyone.” See: Stavic, S., “Kampuchea: Socialism Without a Model”, *Socialist Thought and Practice* 18, 1978, p. 67.

**312** This reality helped contribute to the now infamous 2001 Land Law. The 2001 Land Law was considered a key moment in policy-making for many reasons. Article 8 of the Land Law states that “only natural persons or legal entities of Khmer nationality have the right to



ownership of land in the Kingdom of Cambodia." There are, however, ways of circumnavigating this law. If you plan on spending a large amount, the Cambodian government may even grant citizenship to get around legal barriers. Article 30 states: "Any person who, for no less than five years prior to the promulgation of this law, enjoyed peaceful uncontested possession of immovable property that



The lake on the site of the future CamKo in 2003 (top). By 2005, a large area has been infilled (middle). By 2008, we can begin to see the footprint of CamKo appearing (bottom).

by vernacular and ancient forms, float above spaces opened for cross-ventilation. Brise soleils shield interiors from the harsh light, while other spaces use evaporative cooling to control interior temperatures.<sup>320</sup>

### 'New history is coming'

Molyvann's gentle touch is nowhere evident in CamKo City. Located at the edge of Phnom Penh, CamKo City straddles the city boundaries with one half surrounded by dense, low-rise urban fabric, and the other half facing a lake—newly-excavated from existing marsh and fish ponds. The land on which CamKo is built actually used to be the Pong Peay Lake, creating the somewhat ironic contrast of land that is both filled in and dug out in order to construct the New Town. Across the new lake, CamKo will face rural settlements until rising land prices induce more developers to wipe out the villages.<sup>321</sup>

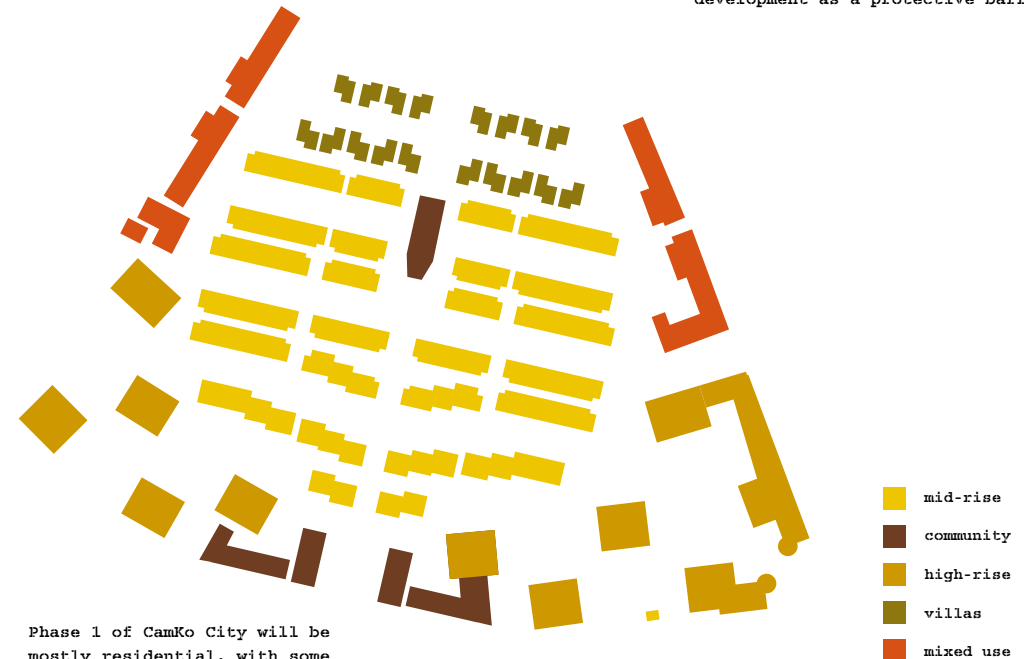
At an urban scale, CamKo's streets are laid out in a semi-circular radial grid much like a scaled-down version of Phnom Penh itself. The Beaux-Arts influence is clear in CamKo's axial avenues and vistas. The New Town's spatial relationship with the partially-drained Pong Peay Lake recalls Phnom Penh's strong directionality towards the confluence of the Tonlé Sap, Mekong and Bassac rivers.

The New Town's masterplan is divided into three programmatic zones. Along the lakefront edge, the Commercial Zone runs from north to south. Moving south from the northern tip of the shoreline, a hotel complex is followed by serviced residence and retail shops. A convention center and Cambodia trade center lie on the northern edge of the main water canal. Where the canal empties into the lake, a large square juts into the water—the future home of City Hall. On the other side of the canal, a large financial center is followed by mixed-use buildings, a shopping center, and office buildings. Many people suspect the New Town of intentions to attract both business and commerce away from downtown Phnom Penh. It is clear, in any case, that the incorporation of both the trade center and the financial district signify Korea's continued involvement in Cambodian economic development.

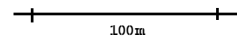
Although CamKo is a relatively small New Town (just 119 ha), the strict zoning makes for clearly differentiated districts. On the eastern edge, a ring of high-rise condominiums inscribes a semi-circle around the periphery of the town. The next internal ring is made up of town houses and a few mid-rise condominiums, while the most central ring is filled with villas, creating spatially defined degrees of economic wealth. The organization of these dwellings places the highest (and least expensive) housing units at the periphery of the New Town,



CamKo's waterfront is occupied by high-rise commercial towers, while residential towers encircle the whole development as a protective barrier.



Phase 1 of CamKo City will be mostly residential, with some commercial and mixed-use areas.





Type	UH 1	UH 2	UH 3	UH 4
Contract Area(m <sup>2</sup> )	148.39	224.50	118.20	113.79
Bed Room	3	4	2	2
Price(USD)	184,047 – 203,245	324,506	149,139 – 169,466	143,575 – 156,278

Luxurious Town House in Camko City, Ideal for Expatriates

- \* Ideal for family with children: 3 bedrooms (1 master room, 1 children room, 1 standard room), 1 working room, 1 living room, 3 restrooms.
  - \* Fully furnished: 5 aircons, 3 tvs, 1 fridge, 1 washing machine, beds, tables, chairs...
  - \* Community facility: 24h/24h security, clean and calm place, swimming pool, gym, playground...
- Asking price: USD1000/month

ID: 71279	Category: House / Flat
Location: Phnom Penh	Price: \$1,000.00
Brand: Tuol Kork Area	Contact Name: Channora
Phone: 855(0)16303132	Email: channora.ouch@gmail.com
Address:	Website: www.cam111.com



The center of the city is occupied by the most expensive housing. High-rise apartments ring the villas, providing a sort of urban buffer from downtown Phnom Penh.

creating an imposing border where the New Town meets the existing landscape. A six-lane ring road further strengthens this distinction, while a concrete and wrought iron wall removes any ambiguity. The guardhouses at every (gated) entrance, CCTV cameras and videophones send an explicit message to outsiders: Even if it houses the most public facility in the city (City Hall), CamKo City is still a members-only club.

The very core of the New Town is made up of a technical college and international school on the northern side of the canal, with a medical center and public school to the south. This centralized space for public services exists in contrast to historic New Town planning principles. While the Garden Cities and their offspring were primarily concerned with the neighborhood unit (generally organized by gathering housing around a primary school), in CamKo this organization has been scaled-up to the urban level. CamKo dismisses the neighborhood as a planning strategy altogether, and instead uses the residential area as a sort of buffer against the teaming urbanity of Phnom Penh. Protected by nearly 400 m of this insulating residential bulwark, the Public Zone is located at the central point of the entire development.

The first phase of the New Town is comprised primarily of residential units with a few semi-public amenities thrown in. Residence types include town houses, villas, mid-rise and high-rise condominiums, as well as a swimming pool, clubhouse, playground, gymnasium, and daycare center.<sup>322</sup> Parking lots surround the towers, and there is just one entry point into the neighborhood from the main road. The first wave of residents moved into the 182 units in 2009 and more followed as Phase 2 reached completion at the end of 2010.<sup>323</sup>

can lawfully be privately possessed, has the right to request a definitive title of ownership." This stipulation, however, has been laxly enforced, and villagers' requests for a definitive title of ownership are often simply rejected in favor of large-scale developments. See: Land Law, 2001. Adopted by the National Assembly of the Kingdom of Cambodia in Phnom Penh on July 20, 2001. English version online at [www.gocambodia.com/laws/](http://www.gocambodia.com/laws/), retrieved on November 25, 2010.

**313** The young population is also relatively homogenous. Around 96% of Cambodians practice Theravada Buddhism, and 90% are ethnically Khmer. See: <http://www.nis.gov.kh/>, retrieved on November 2, 2010.

**314** For a more in-depth look at Cambodian development before the Khmer Rouge, see: Ayers, D.M., Anatomy of a Crisis: Education, Development, and the State in Cambodia 1953-1998, University of Hawai'i Press, 2000.

**315** Lee, Y. and Ismail, N., "Pol Pot Victims From Killing Fields Plan Resorts by Angkor Wat", Bloomberg, August 27, 2008. See: <http://www.bloomberg.com/apps/news?pid=newsarchive&refer=home&sid=ajlg8Wk4lkfp0>, retrieved on November 16, 2010.

**316** <http://www.doingbusiness.org/data/exploreconomies/cambodia?topic=getting-credit>, retrieved on November 22, 2010.

**317** Carmichael, R., "Cambodia rushes anti-corruption law through parliament", ABC Radio Australia, March 12, 2010.

**318** For a detailed description of colonial Cambodia, see: Edwards, P., Cambodia: The Cultivation of a Nation, 1860-1945. University of Hawai'i Press, 2007.

**319** Among the New Towns designed by Molyvann are: Sihanoukville (now a major port city and tourist attraction on the Gulf of Siam) and Tioulongville, about 100 km southwest of the capital. Molyvann's plans for Sihanoukville were never fully realized, in fact, only a few of his buildings remain. The brewery, a church, the train station, the port and some of the infrastructure was complete when the political chaos of 1970 put an end to construction.



Fields of grass surround CamKo, giving the enclave a strong presence in the flat landscape.







The fence surrounding the New Town opens at a series of guarded entrances.



Molvann's plans for the New Town included a modernist zoning organization, clear areas preserved for future growth and integrated bicycle and pedestrian routes.

**320** Molvann studied under Le Corbusier at the l'Ecole des Beaux Arts during the late 1940s, and the brise soleil are a familiar element of Le Corbusier's repertoire. Molvann's buildings are a hallmark of the New Khmer movement, and they are in danger of being lost forever as Phnom Penh grows. See: <http://www.vannmolvannproject.org> for more on this architect.

**321** Although CamKo is at the northern edge of the capital, its peripheral location won't last for long. CamKo is still just four kilometers from the city center, and north of CamKo, Grand Phnom Penh International City is currently under construction. When completed, Grand Phnom Penh will be almost twice as large as CamKo and house more than 4,000 families. This next New Town will push the capital's boundaries more than eight kilometers from the city center.

**322** [http://worldcitycambodia.com/phase\\_01.html](http://worldcitycambodia.com/phase_01.html), retrieved on November 15, 2010.

**323** Phase 2 is also made up of largely residential areas, with some semi-private leisure facilities and a public school. The complete project is scheduled for completion in 2018.

**324** Goodman, D., "Koreans have to adjust, says head of contractor body", *The Phnom Penh Post*, January 6, 2011.

**325** In a country where 35% of the population lives below the poverty line, the price tag for a single-family residence in CamKo is unconceivable. See: <https://www.cia.gov/library/publications/the-world-factbook/geos/CB.html>, retrieved on October 5, 2010.

**326** <http://mediakh.net/business-and-eco/camko-city-development-to-get-first-100-occupants/>, retrieved on November 16, 2010.

**327** Liao Ran, senior program coordinator



The community center provides recreational and social programs at the center of the neighborhood, 2010.

Although CamKo's spatial planning incorporates some contextual elements, its architecture (perhaps due to its Korean influence, or perhaps because it is intended to appeal to foreigners), is surprisingly generic in both design and materiality. The now familiar animated fly-throughs show tree-lined avenues and glittering glass facades. The high-rises are relatively mundane, with stacked-pancake flats, accessed via a central circulation core, and differentiated mainly by paint color. The surrounding villas and townhouses are slathered in white stucco and topped with terracotta roofs. Small windows and balconies affirm the necessity of air-conditioning, while the deep blue tinted glass windows are one of the few hints of local aesthetics.

The prohibitive cost of housing in the New Town acts as an exclusionary element. In fact, for the Korean developers, the target market includes just the top 1% of Cambodians.<sup>324</sup> The other 99% of the country cannot afford even the cheapest apartments, which start at \$108,000 and run up to \$130,000.<sup>325</sup> The larger condominiums go for \$135,000 - \$300,000. Two-story townhouses sell for between \$220,000 and \$300,000, while the single-family villas will put you \$350,000 - \$400,000 out of pocket.<sup>326</sup> Many critics are wondering just who is going to buy these homes when even government employees earn a monthly average of just \$90-\$125.<sup>327</sup> Defendants of the project argue that the development provides employment opportunities for the poor, while detractors condemn the image of a future island of skyscrapers surrounded by slums.<sup>328</sup>

According to Kheng Ser, Assistant to CamKo Vice President DK Kim, "The luxury properties have proven popular with local and foreign business people, [especially] with foreign nationals from France, Australia, the United States, Korea and China."<sup>329</sup> Although the real target buyers for the New Town properties are clearly expatriates and foreign



Villas are enclosed by a ring of mid-rise towers, 2010.

businesspeople, Cambodia only legalized foreign real estate ownership as recently as April 2010. The new law allows foreigners to lease apartments and houses indefinitely, but they have no claim over the land. For this reason, the Foreign Ownership Property Law restricts foreigners to buying property on the first floor above the ground floor.<sup>330</sup> It is unclear whether this law will actively prevent foreigners from purchasing the villas, since they clearly occupy the ground floor, but previous experience would lead one to believe that there are ways around the legalities for those with sufficiently deep pockets.

### An important addition

The municipal government is supporting the project, as Phnom Penh Deputy Governor Mann Chhoeun explained, CamKo City represents an 'important addition' to the capital because it will help redistribute the growing population and reduce congestion.<sup>331</sup> In fact, CamKo could never accomplish this alone: the New Town is part of a larger strategy put in place by the municipality of Phnom Penh since 2005. As part of the Phnom Penh Masterplan 2020, the city government has been working to complete a half dozen similar satellite projects before the 2020 deadline.<sup>332</sup> The anticipated population boom for the Phnom Penh metropolitan area will bring an estimated 10,000 families per year to the city. The already congested streets and infrastructure will face increasing stress from the influx of newcomers. Government officials consistently cite the New Town projects as the most promising way to deal with anticipated housing shortages and traffic congestion.<sup>333</sup>

Drafted in 2005, the Phnom Penh Masterplan 2020 lays out the municipality's urban development goals and strategies for the coming years. Governor of Phnom Penh Kep Chuk Tema has said that, "one of

for East Asia, Transparency International quoted on "Cambodia's Ghost Workers get Immunity", *Radio Australia*, *Australian Broadcasting Corporation (ABC)*, November 23, 2010.

**328** There is also a local sensitivity towards the fact that the project is funded by a South Korean bank, while Cambodian initiative is relegated to construction.

**329** <http://mediakh.net/business-and-eco/camko-city-development-to-get-first-100-occupants/>, retrieved on November 16, 2010.

**330** Further restrictions include a ban on property within 20 miles of the Cambodian border and foreign ownership of any single building is limited to 49%. See: "New Law Allows Foreigners to buy property in Cambodia, but not Land", *Property Wire*, April 7, 2010. <http://www.propertywire.com/news/africa/cambodia-real-estate-law-201004074023.html>, retrieved on November 22, 2010.

**331** <http://mediakh.net/business-and-eco/camko-city-development-to-get-first-100-occupants/>, retrieved on November 16, 2010.

**332** The CamKo City site was appointed as the development zone for a 'New Satellite City' in February of 2003 by the Bureau of Urban Planning in the Municipality of Phnom Penh.

**333** Say, S., "Cambodian cities of the future - they're just around the corner", *The Phnom Penh Post*, October 14, 2010.



**334** From a news release by the Royal Embassy of Cambodia. “Cambodia in Focus”, Issue 27, September 2005. <http://www.embassyofcambodia.org.nz/september/September8.htm>, retrieved on November 17, 2010.

**335** Sovan, N. and Say, S., “Phnom Penh Mega Construction Projects will be FINISHED”, Phnom Penh Post, March 4, 2009.

**336** Nielsen, T., “Low income housing plan lacking as capital grows”, Phnom Penh Post, January 7, 2009.

**337** Sovan, N. and Kimsong, K., “Honoring the Suburban Dream”, Phnom Penh Post, June 26, 2008.

**338** Grant Ross, H. and Collins, D.L., *Building Cambodia: ‘New Khmer Architecture’ 1953-1970*. The Key Publisher Co. Ltd., Bangkok, 2006, p. xxiv.

**339** <http://www.lmw.co.kr/service/service.htm>, retrieved on November 22, 2010.

**340** All of the bank’s major shareholders are South Korean companies, including: Hanil Engineering & Construction Co. Ltd. (which was involved in both the civil infrastructure as well as building construction in CamKo City), Hankook Cement Co. Ltd., FIDES Investment Management Co. Ltd., Busan Mutual Savings Bank and Busan2 Mutual Savings Bank (both of whom are clients of FIDES), Hyundai Paint Industrial Co. Ltd., Jewoo Elex Co. Ltd., Seoul Credit Rating & Information Inc., and San Kyeong M&A Capital Co. Ltd.

the important strategic orientations of the Masterplan is to create new urban centers to prevent urban sprawl and anarchic urbanization and to promote the development in the suburban areas which are able to absorb the rapid urban growth.”<sup>334</sup> According to Frederic Mauret, the city’s French technical expert for the 2020 municipal masterplan, one of the city’s main issues will be dealing with population growth.<sup>335</sup> The New Towns incorporated into the Masterplan 2020 are seen as a way to control and direct this expansion, while providing housing for the influx of people. In addition to CamKo, the New Towns include: Koh Pich City, Boeung Snor, Sunway City and Grand Phnom Penh. However, since all of the New Towns target an upper class buyer market, lower and middle class citizens will be forced to find housing elsewhere. As a planning document, the Masterplan 2020 lacks an effective strategy for low-income housing in Phnom Penh, despite the fact that most of the newcomers will be from poor agrarian backgrounds. Experts worry that the poor will be forced farther out of the city, making it more difficult for them to commute to work, and thus fueling their dependence on aid programs.<sup>336</sup>

Critics like Ching Chhom Mony, dean of the Faculty of Architecture at the Royal University of Fine Arts, worry that the planners will also compromise Phnom Penh’s French Colonial design. “The development plan set out by City Hall is designed by novice architects without input from [senior] architects or following the French style.”<sup>337</sup> Mony’s comments are representative of an ongoing stylistic dispute among Cambodian designers. Older architects and planners tend to place more value on the Beaux-Arts planning style of old Phnom Penh, while younger generations look towards contemporary Western development as a model for Cambodian cities. The New Khmer style made famous by Molyvann is—oddly—often seen as ‘un-Cambodian’ and finds its supporters mainly among architectural students and resident foreigners.<sup>338</sup>

## ‘We build best world city’

Although the ‘Best World City’ is the part of this catchphrase that garners media attention, it is the compact, humble, ‘We’ that deserves attention. Just who is building this city? CamKo City is being developed by World City Co. Ltd.—a real estate and infrastructure developer led by Korean CEO Sang Ho Lee. Sang Ho Lee is chairman of World City as well as President of LandMark Worldwide Co. Ltd. LandMark Worldwide is managing both the CamKo project and foreign direct investment in the New Town. As its name implies, LandMark Worldwide develops ‘monumental landmarks’ by offering project development, management and financing services.<sup>339</sup> The project is partly financed by South Korea’s Shinhan Bank, and partly through the sales of CamKo City properties. Total costs are estimated to be around \$2 billion, and Shinhan Bank will front only \$65 million to construct the city’s first thousand residential units and some civil infrastructure.

The same developers opened CamKo Bank in 2007, offering specialized loans for CamKo City residential properties.<sup>340</sup> The bank is located in the

villa of former National Police Director-General Hok Lundy in downtown Phnom Penh. A year after the bank opened, the infamous General died in a helicopter crash. Brad Adams, Asia Director at Human Rights Watch (HRW) described Lundy as representing “the absolute worst that Cambodia has to offer.”<sup>341</sup> Lundy was “part of a conspiracy to carry out a grenade attack on opposition leader Sam Rainsy in March 1997, in which sixteen people were killed and more than 150 injured.”<sup>342</sup> His involvement has also been alleged in both drug and human trafficking operations. Lundy’s reputation for corruption and his mysterious connection to the bank’s origins have contributed to rumors of money laundering through CamKo Bank.<sup>343</sup>

In December 2009, World City Co. Ltd., signed an agreement with the Royal Government of Cambodia to co-develop a financial development district (FDD) and a \$6 million stock market building inside CamKo to house the kingdom’s first stock exchange (CSX).<sup>344</sup> The government awarded the contract to World City Co. Ltd. after rejecting the developer’s first design as “not sufficiently Khmer in style”.<sup>345</sup> The building’s design is currently undergoing adjustments by architects in South Korea—presumably to make it ‘more Khmer’.<sup>346</sup> But Korean involvement doesn’t end at the drawing table. In fact, the Korean Exchange (KRX) currently holds a 45% stake in the CSX. KRX’s intimate support ranges from training and seminars, to assistance with the development of the Cambodian regulatory framework, to the production of stock exchange-related IT equipment and materials. The CSX was scheduled to open in May 2010, but has twice pushed the opening back, most recently until July 2011, because of the global economic crisis.<sup>347</sup> Three state-owned enterprises are currently set to list at next year’s launch, and in November 2010 fifteen securities firms were granted licenses to operate on the bourse.<sup>348</sup>

So what does the Korean Exchange get out of its close involvement with the CSX? Other than a hefty stake in the CSX, opening operations in Cambodia will help the KRX become a more global player. Since listing 3Nod Digital (a Chinese electronics company) in 2007, the KRX has pushed to transform into an international stock market, adding eleven Chinese companies and one Japanese company in the past three years.<sup>349</sup> Cooperation with the Cambodian exchange would further solidify its presence in the Southeast Asian economy.

## Growing pains

In addition to scheduling delays, CamKo City has faced its own unique variety of growing pains. In 2009, angry construction workers converged on the CamKo City development offices, incinerating a car and breaking out the building’s windows with rocks. They represented just a small part of a much larger group of more than 1,000 workers who went on strike earlier in the week, claiming they had not been paid their monthly wages. The dispute arose three days after the company failed to pay the workers their \$80 - \$150 paychecks. Construction workers, owing rent and desperate for food, attacked the building in a show of frustration.<sup>350</sup>

**341** US: Notorious Cambodian Police Chief in US for Counter-Terror Talks at FBI, Human Rights Watch, Washington, DC, April 16, 2007

**342** Ibid.

**343** “Camko City Announces \$2 Billion Capital for Sister City Development, but It Uses Khmer Citizens’ Money”, *The Mirror*, Vol. 11, No. 514, June 26, 2007.

**344** Cheang, S., “Cambodia Delays Stock Market Debut to Next July”, *The Irrawaddy*, July 22, 2010.

**345** Say, S., “Contractor World City Co. Ltd. of South Korea was told that designs were not sufficiently Khmer in style, it says”, *The Phnom Penh Post*, July 9, 2009.

**346** Until the designs meet government approval, the new Cambodian Securities Exchange (CSX) will find a temporary home on the 25th and 26th floors of the Canadia Bank building: Phnom Penh’s tallest tower. See: Say, S. and Kunmakara, M., “Bourse finds first home” *The Phnom Penh Post*, November 15, 2010.

**347** According to the Finance Ministry, in July 2011 the bourse will open ‘at all costs’. The Finance Ministry is quoted in: “Cambodia Approves 15 Security Firms for new Bourse”, *Reuters*, November 2, 2010. In July 2010 the Finance Ministry issued a statement claiming that, “the postponement of the stock market is to adapt to the evolving situation of the global economic and financial situation, which shows some positive signs of recovery but is still fragile.” See: Cheang, S., “Cambodia Delays Stock Market Debut to Next July”, *The Irrawaddy*, July 22, 2010.

**348** According to Finance Minister Keat Chhon, the licences were awarded to seven underwriters, four brokers, two investment advisers and two dealers. See: “Cambodia closer to Exchange Launch”, *The Straits Times*, November 2, 2010. See also: Sovan, N., “Taking stock: Cambodia’s exchange”, *The Phnom Penh Post*, September 14, 2010.

**349** Ja-young, Y., “KRX Top Draw for Foreign Investors”, *The Korea Times*, May 20, 2010.



**350** Reaksmeay, H., VOA Khmer. Voice of America radio program, originally aired on October 28, 2008. Original report from Phnom Penh.

**351** Khmer, S.Y., “CamKo City clients feel uncomfortable about not having clarity over removal of soil from Pong Peay Lake”, *The Mirror*, Vol. 11, No. 525, September 14, 2007.

**352** “CAMBODIA: Nine families from a village in Phnom Penh are facing forced eviction by the municipal authority”, Asian Human Rights Commission, Urgent Appeals Programme, January 8, 2007. See: <http://www.humanrights.asia/news/urgent-appeals/UA-006-2007>, retrieved on November 12, 2010.

**353** <http://www.ahrchk.net/ua/mainfile.php/2007/2155/>, retrieved on November 18, 2010.

**354** Winstanley, J., “Land Law and Forced Evictions in Cambodia”, *The Huffington Post*, July 3, 2008. [http://www.huffingtonpost.com/jennifer-winstanley/land-law-and-forced-evict\\_b\\_110404.html](http://www.huffingtonpost.com/jennifer-winstanley/land-law-and-forced-evict_b_110404.html), retrieved on November 18, 2010.

**355** Cambodia: Questions over Legality of Evictions in Name of Development. IRIN: Humanitarian News and Analysis, August 18, 2008.

In 2007, the New Town received criticism for evicting people living in small towns around Pong Peay Lake.<sup>351</sup> Before construction began, much of the lake was illegally filled by the CamKo City developers, who then refused to remove the infill soil after a court order requested them to do so. Before it was filled, Pong Peay Lake acted as a natural drainage area for the city of Phnom Penh, reducing flooding during the wet season. This same situation arose at Beong Kak Lake, in 2006, after developers began filling the lake. Unfortunately, due to its dated infrastructure, Phnom Penh cannot afford to allow the city’s natural drainage systems to be ravaged. The Asian Human Rights Commission reported in January 2007 that nine families from the village of Tuoi Kok on the banks of Pong Peay Lake had been “peacefully protesting their forced eviction by the government.” According to the call for action, “the villagers [had] been displaced due to the construction of a new public road by a South Korean company named World City Co. Ltd., which will run through the infilled Pong Peay Lake towards the city of Phnom Penh... The municipal authorities and the Korean company have already begun demolishing the villagers’ neighborhood with bulldozers in order to pressure them to accept a well-below market price offered to them as compensation. In light of the insufficient proposal, the villagers refused to accept the USD 50/m<sup>2</sup> offer that was presented by the Municipality of Phnom Penh.”<sup>352</sup>

Cambodia has a deplorable record of human rights abuses, and for this reason the 2001 Cambodian Land Law was considered a watershed in housing policy because it gave land ownership rights to any person living on land for more than five consecutive years. In this case, all the villagers fit the criteria for legal ownership; their requests, however, have been ignored.<sup>353</sup> Ironically, although the Land Law was designed to give greater rights to the poor and protect their legal interests, critics like journalist Jennifer Winstanley state that the 2001 Cambodian land law is instead “used as a tool to legitimize land-grabbing by a rich and powerful elite. The relocation of thousands of people, entire communities and villages, is done in support of economic advancement and there is little that the average Cambodian can do to protect their right to the land.”<sup>354</sup>

In another example of Cambodian evictions, residents living on the shores of neighboring Boeng Kak Lake were told in 2006 that the lake would be filled and they would have to relocate; eventually, more than 4,000 families were indeed forced to relocate.<sup>355</sup> The case has since become somewhat infamous, with various demonstrations and protests now attracting international attention. In an open letter written by the International Federation for Human Rights (FIDH), the Centre on Housing Rights and Evictions (COHRE), Human Rights Watch and Amnesty International, the authors criticized Mr. Kep Chuktema, (Governor of the Municipality of Phnom Penh) for the government’s role in the forced eviction of residents in the Phnom Penh Municipality. The authors expressed concern over the series of troubling events. “Without prior meaningful consultation, affected communities are currently being made non-negotiable offers of compensation or houses in a relocation site on the outskirts of Phnom Penh. The compensation offered is insufficient

for families to obtain comparable alternative housing. Housing at the relocation site is not adequate: infrastructure is poor, basic amenities including clean water is lacking, and access to work opportunities is very limited given the distance from the city. Moreover, offers include no formal security of tenure for those agreeing to move... We also note with concern the prevalence of forced evictions in Cambodia. Forced evictions are evictions that are carried out without adequate notice, consultation with those affected, legal safeguards or assurances of adequate alternative accommodation. They violate Cambodian law and Cambodia’s international human rights obligations.”<sup>356</sup> According to Cambodian human rights agencies, a staggering 50,000 people throughout the country were evicted to make room for development projects in 2006 and 2007, making it the largest series of forced evictions since the Khmer Rouge left power.<sup>357</sup> Over the last decade, the illegal sale of land (and resulting evictions) has reached unimaginable rates. In fact, 45% of the country’s total landmass now belongs to foreign owners. Despite the technical illegality of foreign ownership, over the course of eighteen months almost half of the country’s land was sold to foreign speculators under Hun Sen’s government.<sup>358</sup> The move was called a ‘fire sale’ and foreign investors moved in to gobble up almost half of the country. The massive privatization effectively exiled thousands of Cambodians. According to British newspaper *The Guardian*, “Hun Sen and his ruling Cambodian People’s Party (CPP) have, in effect, put the country up for sale. Crucially, they permit investors to form 100% foreign-owned companies in Cambodia that can buy land and real estate outright—or at least on 99-year plus 99-year leases. No other country in the world countenances such a deal. Even in Thailand and Vietnam, where similar land speculation and profiteering are under way, foreigners can be only minority shareholders.”<sup>359</sup>

Korea’s careful investment in Cambodia’s future, and especially the CamKo City development, means that the country can steer the kingdom’s investment in ways that would otherwise be impossible. Over the course of the last thirteen years, this control has spread from aid projects to a completely New Town. What does it mean when another country creates a town in a foreign land? What about when a foreign country develops a international stock market from scratch? Or builds a City Hall for another nation? While Cambodians are being driven off their land, foreign governments are buying up almost half of the kingdom’s landmass—sold in bulk by Hun Sen’s government. If the anti-corruption laws fail to have the desired effect on government policymakers, Cambodia’s people may yet bring about change on their own terms.

**356** The authors published the letter jointly on various websites on December 4, 2008. The full letter is available for download at [http://www.cohre.org/view\\_page.php?page\\_id=331](http://www.cohre.org/view_page.php?page_id=331)

**357** ADHOC publishes yearly reports on Cambodian human rights situations. You can download the pdf at their website: <http://www.adhoc-chra.org/>

**358** Levy, A. and Scott-Clark, C., “Country for Sale”, *The Guardian*, April 26, 2008.

**359** Ibid.



Diamond Island City is one of the other prestigious satellite city projects currently being developed in Phnom Penh.



“Economic Cities as a group place a premium on attracting investment, and in this sense, residential areas are approached as a necessary byproduct rather than a *raison d’être*.”



## Chapter 4: Economic Cities: Diversification in the Oil Age

Economic Cities are clear about their ambitions. Strengthening the financial capabilities of a region or state is always the top priority for these New Towns. Whether that happens as a result of diversifying an oil-dependent economy, by creating industry, by supporting research—or by combining all three strategies—these New Towns are transforming the face of the world. In the process, they are used as marketing tools on an international stage. Nation branding is not a new concept, but as globalization spreads, every country is suddenly competing on the world stage for foreign investment, tourism and entrepreneurs. When businesses can go anywhere, what makes one nation more attractive than its neighbors? For these New Towns, exploiting market niches and creating business incentives is a means of survival.

In Saudi Arabia, a country for whom fossil fuels are synonymous with development and modernization, King Abdullah Economic City is part of a national strategy to completely reinvent the country’s economic profile. King Abdullah Economic City (KAEC) is just one of four planned Economic Cities in Saudi Arabia. The \$60 billion investment in the four New Towns is a sign of the kingdom’s commitment to sustained economic growth.<sup>360</sup> The New Town’s university will educate a new generation of skilled workers and build brainpower at home. A new port and hi-tech industries will provide manufacturing, logistics, telecommunications and export facilities. A mix of residential and commercial areas will promote trade and services. Initial projections estimate that the massive New Town will spawn over a million new jobs—a heady number for a country facing 10.5% unemployment.<sup>361</sup> As the city’s PR campaign explains, “The mega-project works closely with the Kingdom’s ongoing drive to expand the economy, create employment opportunities for its youthful population and function as a catalyst to attract foreign investment, global trade, commerce and industry.”<sup>362</sup>

**360** The kingdom is moving towards more private-sector investment, and KAEC is indicative of this change. The project is entirely funded by private investors.

**361** <https://www.cia.gov/library/publications/the-world-factbook/fields/2129.html>, retrieved on February 7, 2011.

**362** <http://www.kingabduhcity.com/en/Home/index.html>, retrieved on February 7, 2011.



Magarpatta, just outside of Pune, India, is a much smaller example. In this New Town, the economic restructuring happened on a community level. India, like China, is notorious for forced evictions made in anticipation of SEZs and IT parks. As the country has developed, powerless farmers have been pushed off their land under the Urban Land Ceiling Act. Facing the spreading urbanization of Pune, and imminent forced relocation, a farming clan of 123 families banded together to found their own New Town enterprise. By resisting buyouts from developers, this group became one of the first New Towns in India where the original landowners remain the current landlords. The New Town's financial success is a reward for seven years of going head-to-head with government regulations and private developers. The story has since become something of an inspiration for farming communities facing off against large-scale developers. At least three additional New Towns have since been modeled on Magarpatta's self-organization strategy.

In Vietnam, just north of Ho Chi Minh City, public and private interests are jointly developing Binh Duong New City. The New Town is part of strategy to industrialize the national economy. Located at the heart of a massive swath of industrial terrain, the New Town will house 125,000 residents and support another 400,000 daily commuters. One might imagine the Binh Duong development as a sort of engine, supplying housing, jobs and materials to the nation's capital. Binh Duong New City is about growth in the New Town specifically, but also about supporting the industrialization and modernization of the entire country.

All three examples exhibit straightforward modern zoning, and a subsequent division of housing and workplace. Economic Cities as a group place a premium on attracting investment, and in this sense, residential areas are approached as a necessary byproduct rather than a *raison d'être*. Unlike the Shelter Cities, a dense commercial center and supporting industries are the spatial priority, and this is evident in all three master plans. In KAEC, industry occupies a giant swath of land, taking up almost half of the city's total 168 km<sup>2</sup>. A massive CBD occupies the center of the city. At just 2.8 km<sup>2</sup>, Magarpatta is comparatively tiny, but the New Town's hierarchical organization is surprisingly similar. A central park is encircled by an office district and IT facilities, while residential areas are relegated to the periphery of the development. North and south of Binh Duong New City, related industry covers more than 30 km<sup>2</sup>—three times the size of the actual New Town.

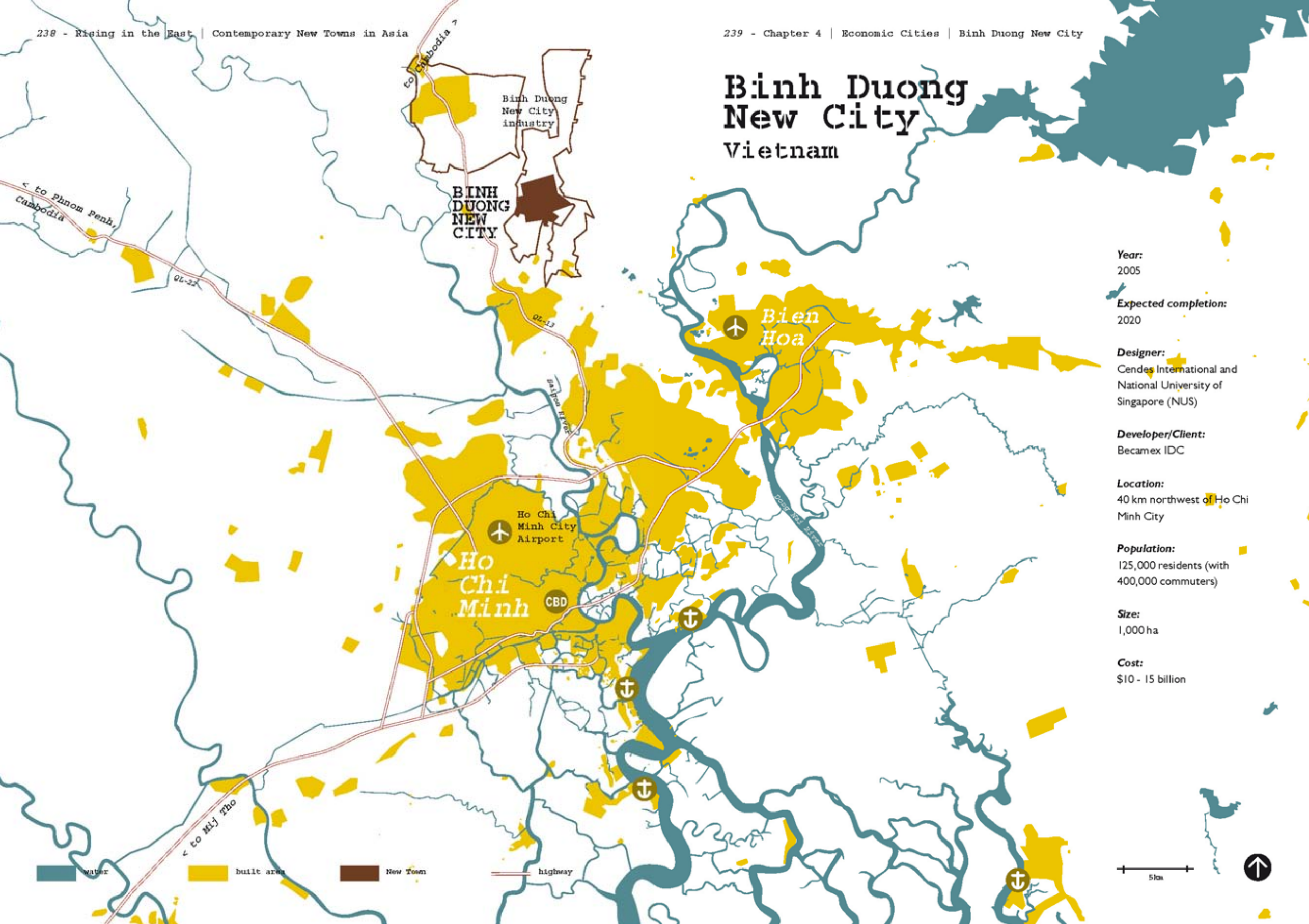
These Economic Cities are harbingers of an increasingly widespread trend. As businesses become more and more mobile, economic policies and tax incentives become attractor mechanisms. By creating Economic Cities where amenities exist as a compliment to business interests, Saudi Arabia, India and Vietnam are all in a strong position to attract global clientele. Despite their variation in size and scale, each Economic City gives its respective country a leg up on the competition; as more companies move in, their attractiveness grows, eventually sprouting a self-supporting system.



Sheikh Mohammed bin Zayed Al Nahyan, Crown Prince of Abu Dhabi, looks over a model of Abu Dhabi 2020 at Cityscape 2010.



# Binh Duong New City Vietnam



**Year:**  
2005

**Expected completion:**  
2020

**Designer:**  
Cendes International and  
National University of  
Singapore (NUS)

**Developer/Client:**  
Becamex IDC

**Location:**  
40 km northwest of Ho Chi  
Minh City

**Population:**  
125,000 residents (with  
400,000 commuters)

**Size:**  
1,000 ha

**Cost:**  
\$10 - 15 billion

water built area New Town highway

5km





Like Songjiang New City outside of Shanghai, BDNC also attracts couples looking for an unusual backdrop for their wedding photos, 2010.



### New Town for the new middle class

Located 30 km north of Ho Chi Minh City (HCM City, formerly known as Saigon), Binh Duong New City will be the new, modern home of 125,000 residents. The industrial terrain and 'brainpark' surrounding the New Town will attract 400,000 daily commuters, creating a serious motivation for better connections with HCM City. In fact, the site for Binh Duong New City was chosen largely because of its good infrastructure. Modern, paved roads already stretch into the site, past rice paddies and wandering cattle. Signs faded by monsoon rains and summer sunlight indicate the land marked out for development.

The New Town is the brainchild of state-owned developer Becamex IDC, a major player in the Vietnamese real estate market. As HCM City faces growing congestion and a serious housing shortage, Binh Duong is set to accommodate workers in what is quickly becoming the manufacturing hub of Vietnam. Part of the Southern Key Economic Zone, Binh Duong Province hosts 28 business parks and more than 15,000 foreign employees. By creating a central urban environment with attractive facilities like international schools, the new provincial administration center and a state-of-the-art hospital (not to mention an amusement park) Becamex hopes to attract a rising middle class to forego HCM City for Binh Duong New City.

Although Vietnam's experience with New Towns spans centuries, New Town building has recently come back in vogue as a major planning strategy for the national government. In fact, in just the past five years, Vietnam has built 37 new urban centers.<sup>363</sup> As the population continues to swell, New Towns are seen as the most effective way of distributing the influx.

### From Indochine Française to Doi Moi

France colonized Vietnam as part of the transnational *Indochine française* in the late 19th century.<sup>364</sup> Vietnam's experience with New Towns stretches back to this period of French colonialism. In fact, HCM City is one of the direct precedents for Binh Duong New City. Planned and built by French colonialists in the 1860s, 'Saigon' was originally imagined as a city for 500,000 people.<sup>365</sup> Around this central urban core, rubber plantations (including the famous Michelin plantation) were planned and built, with small company towns on site to house the workers. These smaller communities included hospitals, churches, pagodas and schools.

During WWII, Imperial Japan installed French agents to oversee Vietnam. After the war, France attempted to regain political control, only to face an eight-year war that eventually ended French occupation in 1954. The First Indochina War established The Democratic Republic of Vietnam north

<sup>363</sup> Ahn, K., "VN creates 37 new urban centers in five years", Ministry of Construction, press release, January 20, 2011.

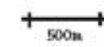
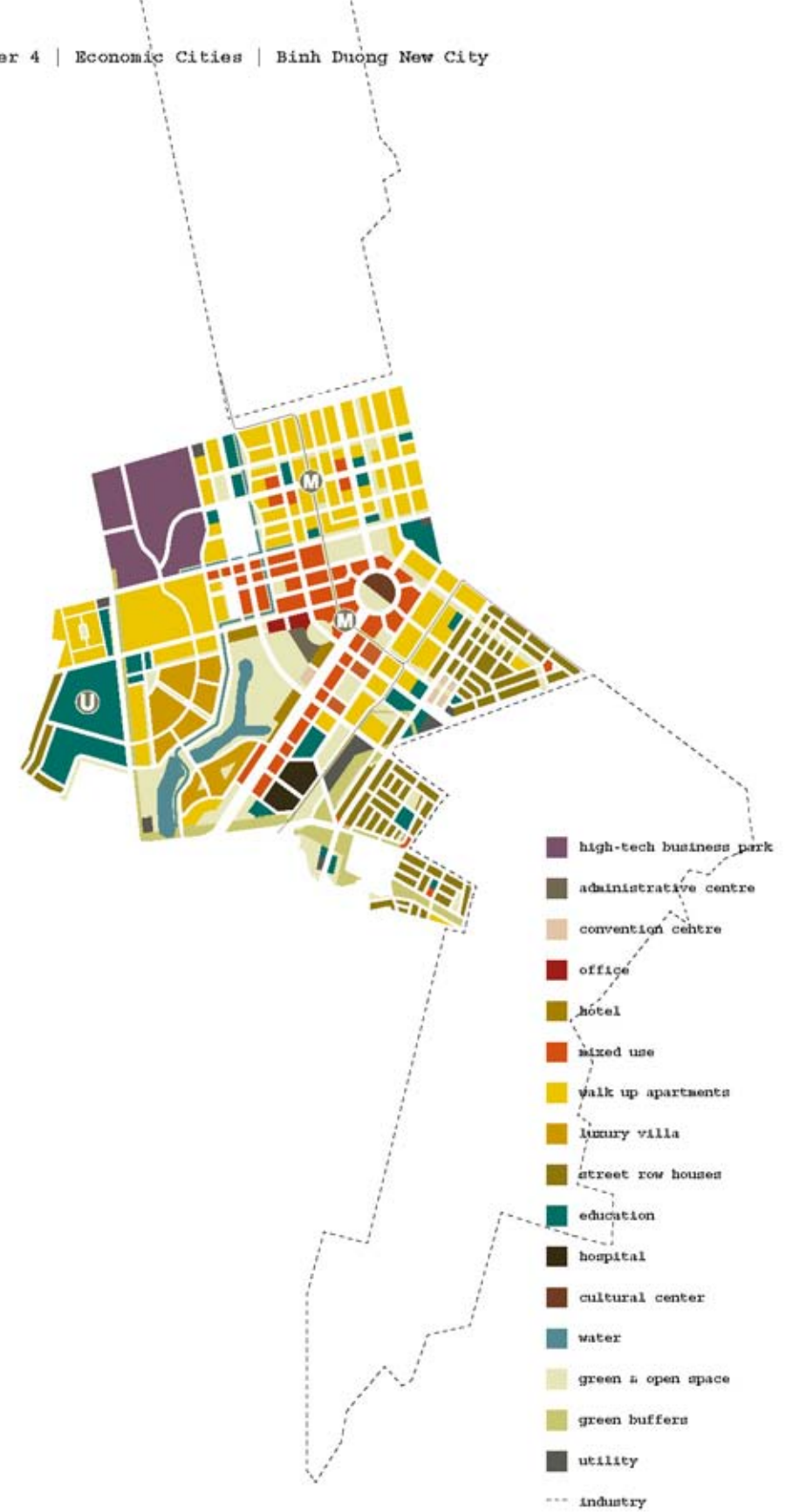
<sup>364</sup> At its peak, French Indochina included three Vietnamese regions (Tonkin, Annam and Cochinchina), Cambodia, a small Chinese enclave and Laos.

<sup>365</sup> Just one part of the city was actually constructed according to plan (District 1).



The future administrative area, currently a construction site, 2010.









The former Thu Dau Mot rubber plantation on the current Binh Duong development area, ca. 1910.

**366** The “Rural Community Development Program” (also known as the ‘Agrovillage Program’) and later, the ‘Strategic Hamlet Program’ were plans made with the help of the US government to create fortified villages that would shield peasants from Communist guerrilla influence. By 1960 there were 23 Agrovilles, yet this program backfired spectacularly and eventually led to mass resentment of the Diem regime’s resettlement policies. See: Elliot, D., *The Vietnamese war: revolution and social change in the Mekong Delta, 1930-1975*, M.E. Sharp Inc., 2007, pp. 105-107.

**367** For an expansive history of Vietnam’s postcolonial growth, see: Pelley, P. M., *Postcolonial Vietnam: New Histories of the National Past*. Duke University Press, 2002.

**368** From 1986 onward, Doi Moi has helped Vietnam strengthen its economy. China’s reforms under Deng Xiaoping are commonly seen as a predecessor for Doi Moi. See: Boothoyd, P. and Nam, P.X. (eds), *Socioeconomic Renovation in Vietnam: the Origin, Evolution and Impact of Doi Moi*, Institute of Southeast Asian Studies, Singapore, 2000.

**369** Vietnam’s real GDP growth rate for 2010 was 6.8%. See: <https://www.cia.gov/library/publications/the-world-factbook/geos/vn.html>, retrieved on January 22, 2011.

of the 17th Parallel and the State of Vietnam south of the demilitarized zone. During the late 1950s, French and American planners advised the President Diem’s South Vietnamese government to use New Towns as a way of organizing the rural environment. These ‘Agrovilles’ or ‘New Life Hamlets’ were conceptualized as a way of insulating peasant communities from communist influence.<sup>366</sup>

In 1959, war broke out again, this time lasting until the fall of Saigon in 1975. As a united country, young Vietnam suffered from serious internal organizational and financial problems. Between 1965 and 1972, Soviet planners were brought in to design and build another wave of New Towns. This time, the New Towns were part of a larger strategy to integrate socialist ideals and implement standard Soviet planning techniques—precisely the opposite intent of their Western precedents.

After facing economic collapse in the early 1980s, the Communist Party of Vietnam began to implement a series of economic and political reforms in 1986.<sup>367</sup> The *Doi Moi* (‘renovation’) campaign helped convert Vietnam’s socialist economy to a more productive combination of top-down planning and free market incentives.<sup>368</sup> Officially known as a “socialist-oriented market economy”, this strategy has helped the nation transition into the 21st century as one of the fastest-growing economies in the world.<sup>369</sup> In 2000, Vietnam signed a landmark bilateral trade agreement with the United States, and the country joined the World Trade Organization in 2007.

Since 1976, Vietnam’s ambitious five-year plans have provided a framework for the country’s development. The *Ninth Five-Year Plan* for 2011-2015 places focus on developing human resources at home to drive domestic development. The Plan aims for 12% annual export growth, largely dependent on increased training opportunities for workers, and the creation of a larger middle class.<sup>370</sup> According to Chairman Manh, the country’s overriding goal is to become an industrialized economy by 2020.<sup>371</sup> Development of Binh Duong New City is directly supportive of this goal.

## After the renovation

Government incentives have encouraged foreign direct investment over the last decade, and contemporary Vietnam measures up favorably to neighbors like China and Thailand. For high-tech enterprises there is a four-year tax holiday and nine years of 50% tax reductions. Other companies benefit from a three-year tax holiday and seven years with 50% deduction.<sup>372</sup> Corporate tax is capped at 25%, and VAT is just 10% (compared to China’s 17% VAT). In the wake of the global economic crisis, however, double-digit inflation rates and a trade deficit—not to mention the startling bankruptcy of state-owned Vinashin—have encouraged Party leaders to embrace reforms.<sup>373</sup> At the Ninth Communist Party Congress in early 2011, outgoing Chairman Nong Duc Manh informed the 1400 delegates that the nation must “renew the growth model and

restructure the economy to speed up industrialization and modernization with fast and sustainable development.”<sup>374</sup>

While Vietnam continues to ease restrictions on foreign investment and increase transparency, corruption remains endemic in this country of more than 90 million. However, authorities claim to be serious about addressing this issue, and speakers repeatedly cited corruption as a major challenge for the incoming government during the Ninth Communist Party Congress.<sup>375</sup> Recently, and much to the chagrin of some major developers, Vietnam’s national government has also gotten serious about reducing speculation. *Government Decree 71* and *Circulation 16* in particular have forced buyers and developers to play by the rules.<sup>376</sup> According to the Decree, developers are limited to selling “just 20% of the housing units of a project via capital contribution agreements prior to the completion of the foundation of the project. The remaining 80% units can only be sold after the foundation is completed, and the sale must be carried out under sale contracts through a real estate trading floor.”<sup>377</sup> These regulations reduce real estate liquidity, inducing developers to come up with more creative financing options to attract buyers. In Binh Duong province, “a number of developers have decided to share the burden of interest rates with homebuyers, in addition to offering more flexible payment terms. SetiaBecamex has announced to bear the interest rate for buyers of villas and row houses in its EcoLake project...

under the program, buyers deposit 30% of a property’s value; and the remaining 70% will be funded by banks with interest rates supported by the developer. So, homebuyers do not have to pay interest rates for their loans until the project is finished and they receive their properties... Buyers could save from VND 70 million (\$3,590) to VND 200 million (\$10,260), depending on their property values.”<sup>378</sup>

The general market slowdown, coupled with more stringent legislation, has produced a wave of more affordable real estate options, largely catering to middle class buyers. In Binh Duong New City, TDC Plaza is exemplary of this new approach. TDC Plaza is a mixed-use complex developed by Binh Duong Trade and Development JSC in the center of the New Town, covering five city blocks, with 779 apartments ranging in size from 82 to 117 m<sup>2</sup>. Prices vary from VND 15 million (\$615) to VND 16 million (\$820) per square meter, and the developer offers potential buyers eight-year down payments, instead of the more usual three-year limit.<sup>379</sup>

Critically, state-owned developer Becamex has not implemented any clear marketing strategy. Thus far, the company has relied on the New Town’s appeal to sell itself. In Vietnam’s crowded housing market,

vm.html, retrieved on January 22, 2011.

**370** Pham, N., “Vietnam’s Communist Party Congress Faces Economic Test”, BBC News, January 12, 2011.

**371** “Vietnam strives for industrialized status by 2020, says Party leader”, The Hanoi Times, January 13, 2011.

**372** The 50% deductions for the first 7 years are from profitable years at 15% + 5% years loss carried forward. See: Pandey, U., “A Chance to Build a City”, The Bangkok Post, January 8, 2009.

**373** Vinashin was Vietnam’s largest shipbuilder and a major contributor to local industries. The state-owned company declared bankruptcy in 2010 and multiple Vinashin officials were arrested.

**374** “Vietnam vows change to build modern economy”, BBC News, January 12, 2011.

**375** In his opening address to the Congress, outgoing party General



The existing market at Binh Duong, 2011.

Secretary Nong Duc Manh “praised the country’s economic development... But he warned that current growth rates may be unsustainable and that companies are lacking in quality, efficiency and competitiveness. He said the country has not been able to reduce corruption and wastefulness, or eliminate ‘moral and lifestyle degradation.’” See: “Vietnam Party Congress opens with blunt accounting of

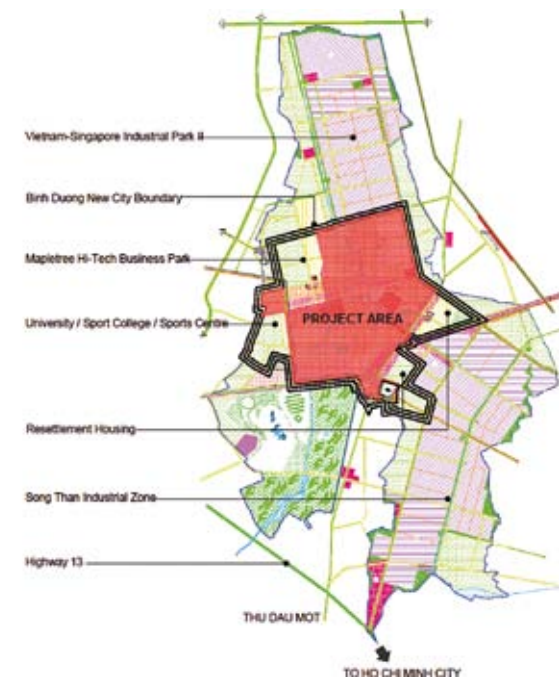


failures”, VOA News, January 12, 2011.

**376** The Government of Vietnam promulgated Decree No. 71/2010/ND-CP (“Decree 71”) on 23 June 2010. “Decree 71 covers a wide range of issues, including the real estate market. Accordingly, clauses 4, 9, 43 as well as clauses 60-72 clarify grade 1 and grade 2 housing projects and independent housing projects and define and identify different types of property investors and traders in the market, including the developers of grade 1, grade 2 and independent housing projects, property businesses, individuals and organizations pooling capital on property projects and genuine buyers. Decree 71 also contains regulations describing



The Visitor's Center at Binh Duong New City, 2011.



BDNC (in red) is just part of a much larger plan to build up industry in the area.

ways the project developers raise capital from the buyers and concrete conditions to diverse capital-raising methods; regulations when individuals and family households transfer their land use rights to a buyer; regulations associated with

however, it may take more than fresh infrastructure to maintain a steady demand. Becamex has not made public any plans for possible fluctuations in the housing market. If supply continues to outpace demand, and nothing is done to control speculation, it's possible that Binh Duong New City could follow the example set by the growing number of Chinese ghost towns. Another challenge for the New Town is a lack of good infrastructure between HCM City and Binh Duong New City. Although there are plans for a new highway and metro, these connections have yet to be realized. Without a more efficient link, few commuters will choose to relocate to the New Town.

### How to house 13 million

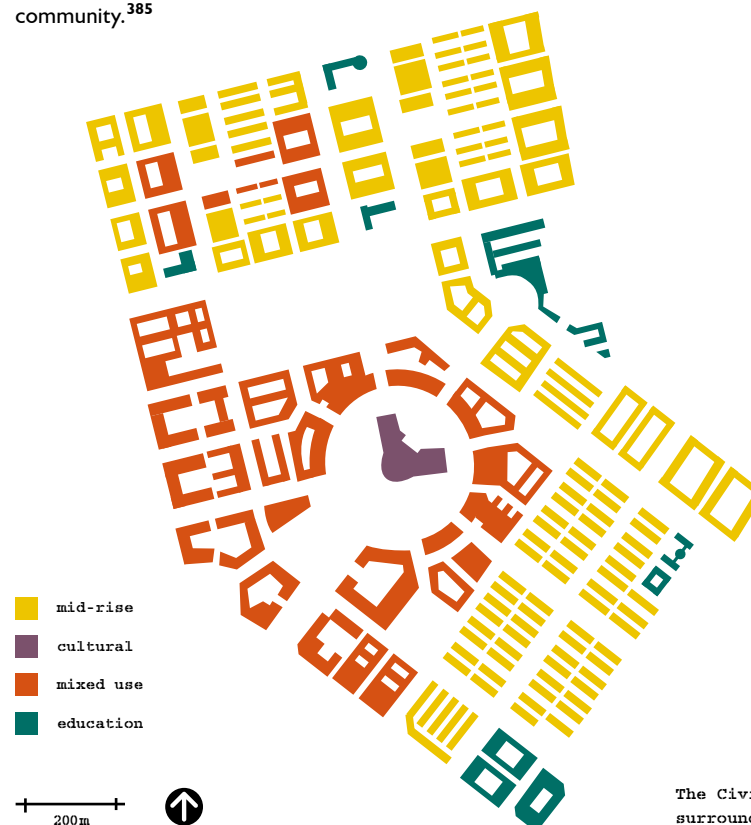
Today, HCM City is a seriously congested city of more than seven million inhabitants, although this number is projected to hit 13 million by 2020. In the HCM City Masterplan 2020, the national and local governments embraced New Town development as a way of dispersing this growing population.<sup>380</sup>

The new, polycentric organization preserves HCM City as “an administrative, cultural, tourist and service center. Meanwhile, the six new districts

are reserved for modern urban quarters, underground parking lots, scientific-technological centers (800 ha in total) and industrial zones.”<sup>381</sup> The plans call for four new infrastructural corridors to link the satellite developments to HCM City. As one of these new nodes, Binh Duong New City will be linked to downtown HCM City via the northwest corridor along Highway 22. If completed, planned metro and train systems will

provide additional connections to HCM City, reducing travel time for the projected 275,000 commuters, as well as decreasing road congestion.

In line with these ambitions, the Southern Sub-Institute of Urban and Rural Planning proposed the Southern Key Economic Zone (SKEZ) in 2005 as a way to concentrate and facilitate development in one part of the country. The proximity of industries and services limits the need for infrastructural development, and HCM City continues to act as the region's urban core, with satellite cities in various surrounding provinces. The SKEZ stretches across eight provinces: HCM City, Binh Duong, Dong Nai, Ba Ria-Vung Tau, Binh Phuoc, Tay Ninh, Long An and Tien Giang. Though it makes up less than 10% of Vietnam's land area, this swath of commercial and industrial facilities accounts for 70% of the country's total export revenues.<sup>382</sup> The area attracts more than 50% of the country's foreign direct investment, and per capita income within the SKEZ is more than twice as high as the national average.<sup>383</sup> As part of this development engine, Binh Duong Province brings much to the table. The southern province has some of the best infrastructure in the country, and has consistently ranked in the top tier of the Provincial Competitiveness Index (PCI), a ranking that promotes industrialization and modernization among provinces by increasing competition.<sup>384</sup> There are currently more than 1800 foreign direct investment companies based in Binh Duong Province, with more than 15,000 foreign employees—creating a huge demand for housing within the expatriate community.<sup>385</sup>



The Civic Axis with the Cultural Center surrounded by mixed-use facilities.

property transactions via trading centers and those that are not required to take place at trading centers; regulations on mortgages and covering types of contracts in property transactions and time bases for the transfer of the ownership rights of land and housing transactions. Decree 71 also comprises regulations and detailed guidance concerning housing transactions of Vietnamese people residing abroad and foreigners owning or leasing houses in Vietnam.” See: “Decree 71 Irons Out Real Estate Market”, Vietnam Business News, August 13, 2010.

**377** Le, P., “Developers Change Tactics to Stimulate Demand”, The Saigon Times, January 27, 2011.

**378** Ibid.

**379** Dung, D., “Local developers launch low-cost condos”, The Saigon Times, October 19, 2010.

**380** HCMC's Master plan 2020 was approved in 1997 as a spatial and financial framework to direct urban development in the municipal area. See: Ha, H. and Wong, T., “Economic reforms and the new masterplan of Ho Chi Minh City, Vietnam: Implementation issues and policy recommendations”, Geojournal, Vol. 49, Number 3, pp. 301-309.

**381** Giang, H., “Master construction plan for HCMC till 2025 revised”, VGP, August 1, 2010.

**382** [http://www.business-in-asia.com/industries/vietnam\\_economic\\_zones.html](http://www.business-in-asia.com/industries/vietnam_economic_zones.html), retrieved on January 31, 2011.

**383** <http://en.baomoi.com/Info/Poor-planning-curbs-SKEZ-progress/5/53736.epi>, retrieved on January 31, 2011. See also: [http://www.business-in-asia.com/industries/vietnam\\_economic\\_zones.html](http://www.business-in-asia.com/industries/vietnam_economic_zones.html), retrieved on January 31, 2011.

**384** The Provincial Competitiveness Index (PCI) is described as an “effort to explain why some parts of the country perform better than others in terms of





Eastern International University, 2010.

private sector dynamism, job creation and economic growth. Using new survey data from businesses that describe their perceptions of their local business environments, as well as credible and comparable data from official and other sources regarding local conditions, the PCI rates provinces on a 100-point scale." <http://www.pcvietnam.org/index.php?lang=en>, retrieved on January 31, 2011.

**385** There are 28 industrial parks in the Binh Duong province. See: "Binh Duong sees better prospects", *The Saigon Times*, December 27, 2010.

**386** There are 58 provinces in Vietnam, which are individually controlled by People's Council elected by their constituents. The People's Council appoints a People's Committee to oversee administration and local law enforcement. These provinces are further divided into districts, provincial cities and towns.

**387** Decision no. 2717/QĐ-UBND. <http://www.becamex.com.vn/en/UP/>

### Bits and pieces

In June 2009, the Binh Duong People's Committee approved the New Town's detailed construction plan with Decision No. 2273/QĐ-UBND.<sup>386</sup> A month later, Becamex received a certificate of land use rights for a project kick-off based on the decision.<sup>387</sup> Singapore-based CENDES designed the masterplan, while the National University of Singapore (NUS) has since taken over responsibility for implementing the design. The New Town will have a centralized political administrative center, international schools and a university, a high-tech park, an office district and residential areas. Industrial parks in the surrounding areas will provide ample employment and investment opportunities.

A large single roundabout occupies the center of the New Town. Open green space and a grand cultural center share the circular space. Surrounding this core are mixed-use buildings, with offices, retail space and residential units. This central area is called the 'Culture Zone' and features a covered pedestrian mall, a performance stage, an event space, and a landscaped sunken plaza.

The radial arteries extending from the roundabout lead to the edges of the city. The northern part is made up primarily of mid-rise residential blocks, with some schools and small retail spaces, as well as a metro station. The artery extending to the west runs past office and hotel blocks, ending at another mid-rise apartment neighborhood and a university campus. The university is part of Vietnam's national strategy



The entrance to an industrial park on the northern edge of Binh Duong New City is marked by a low security gate, 2011.

to train highly skilled human resources at home, rather than importing brainpower. North of the university, Mapletree Business City will occupy the edge of the New Town.

The area between this main road and the radial street heading southwest is occupied by a quadrant of luxury villas and a large central park. A canal encircles most of the villa development, providing a boundary between the open public space and the private housing. This central corridor is almost a line of symmetry for the two halves of the city. Between the park and the roundabout, an administrative center acts a buffer zone. The sprawling administrative center consists of the Party agency bloc, the State management agency bloc, a provincial agency area, central agencies, grassroots administration agency space, and grassroots business agency space. Singapore-based CPG consulting group is responsible for the design. This landscaped sequence is called the 'Civic Axis'. The New Town's second metro station is also located in this area, between the roundabout and the administrative center.

The artery running southwest from the central roundabout is flanked by office buildings, retail, hotels, and a convention center. This is also designed as another major view corridor for the New Town, and the city's main boulevard. This road will be used as BDNC's 'Ceremonial Axis'. It joins Highway 13 at the outskirts of the development, providing the primary gateway into the New Town from HCM City.

[binh-duong-new-city/EXHTHC102709/](http://binh-duong-new-city/EXHTHC102709/),  
retrieved on December 29, 2010.







**388** From least expensive to most expensive, these typologies are: condominiums, courtyard townhouses, row apartments, street row houses, urban terraces and luxury villas (or 'landed houses').

**389** NUS Center for Design Research. 2008. "Binh Duong New City, Vietnam; Masterplan Review and Urban Design" [Brochure], p. 28.

**390** Op. cit. p. 29.

**391** Op. cit. p. 31.

Further from the center, mixed-use residential and retail blocks lead out of the New Town. The southeastern edge of the city is characterized by row houses. Linear green spaces connect the CBD to this low-rise housing area. Planning documents differentiate between six residential typologies.<sup>388</sup> Courtyard townhouses "are inspired by the local mixed-use residential typology. They have the most convenient access from the main road."<sup>389</sup> Row apartments are organized back-to-back, with private parking lots between the back facades. Row apartments face out onto semi-public linear parks "to cultivate more outdoor activity within the community."<sup>390</sup> Urban terraces are slightly more upscale, with three-meter-deep front lawns and seven-meter-deep backyards. Luxury villas occupy the prime real estate on either side of the central park. Each individual plot is 500 m<sup>2</sup> minimum, with a "resort-like atmosphere".<sup>391</sup>

The 110 villas at Sunflower are designed to appeal to international buyers. Straight lines and wide expanses of glass give the homes a contemporary aesthetic.

Older Vietnamese buildings reflect various stylistic influences, including Chinese, Soviet, French and traditional elements. Vernacular Vietnamese architecture is generally built using heavy wood construction, without the stilts that are often seen in other Southeast Asian countries. The vernacular housing typology is almost always single-story, with flat-tiled roofs built to withstand the tropical cyclones. One common typology is the traditional 'tubehouse'. Tubehouses are generally about four meters wide, and can be up to 40 m deep. Their long, linear organization is a product of the premium value placed on street-facing facades. As a result, owners build straight back from the street, combining commercial and living space under one roof. As land values have increased, the

tubehouses have become stacked, sometimes towering seven or eight stories above the street in long sheets. The facades are characterized by brightly painted ornate decoration in a variety of styles, coupled with elaborate wrought iron bars to prevent burglary.

This complex pastiche is at odds with the simple geometries and neutral palettes of the Binh Duong villas. In Sunflower, hedgerows separate individual plots. Single-family houses rise three stories high, physically separate but visually similar. Creamy stucco covers quadrilateral facade elements, while huge windows give sweeping views over a private backyard pool. There is no discernable contextual influence and the villas appear to indicate an aesthetic preference for contemporary generic residential design.



The architecture in Rich Town, a neighborhood in Binh Duong, uses a contemporary geometry to attract potential buyers.



The Green Pearl is a high density residential development in a grid organization.

## New Town, new start

Today, the crumbling French colonial town of Thu Dau Mot serves as Binh Duong's provincial capital. When the administrative and governmental services are moved to Binh Duong New City, Thu Dau Mot will be transformed into a '1st Class Urban Area'—an ambition that requires a total urban rejuvenation during 2011.<sup>392</sup> The old provincial capital is targeting an impressive 21% economic growth, and a per capita increase up to VND 48 million (\$2,460) for its 300,000 inhabitants.<sup>393</sup> The city has plans for serious upgrades in an array of sectors, including new training classes for agricultural workers, lighting systems for 145 rural roads, developing a handicraft industry and stepping up building inspections. With Binh Duong New City set to attract residents with its modern amenities, Thu Dau Mot will have to compete by exploiting its cultural and historical advantages.

As a planned town, Binh Duong New City can offer integrated infrastructure and communication utilities at a level that is largely unknown in rural Vietnam. One of the more revolutionary concepts being implemented in this New Town is the combination of city-level administration with Communist Party agencies. Housing the two government bodies in one complex is a first step towards greater political efficiency and transparency. Binh Duong New City will act as a testing bed for this combination, attracting skilled workers and civil servants as a result. If things go

**392** '1st Class Urban Area' (*thành phố trực thuộc tỉnh*) is a Vietnamese district level subdivision.

**393** The average per capita income for Vietnam in 2009 was \$1,052. See: <http://www.state.gov/r/pa/ei/bgn/4130.htm>, retrieved on February 3, 2011. See also: Tan, K., "Town gradually approaches criteria of 1st class urban area", Ministry of Construction press release, December 28, 2010.





The Political and Administration Building (top) and the Cultural Center (below) form two of the monumental moments in the masterplan, visually connected by a (minor) axis.

according to plan, Binh Duong New City will become not only the new political center of the province, but also the provincial economic engine.

The 1000 ha Binh Duong New City is just part of a much larger, 4200 ha development project called The Binh Duong Urban Service and Industry Complex. Almost half of the Complex (1800 ha) is taken up by industrial parks. The provincial government's goal for these parks "is to attract green industries, environmentally friendly industries with high demand for brainworkers and industries with high regional and international

competitive advantages. First priority is placed on development of electrical industry, electronics, communications products, interior construction, etc."<sup>394</sup>

A golf course and horse-racing circuit will occupy another 320 hectares, while residential areas will cover the remaining 1600 hectares. Five resettlement areas, including Phu My Ward (71 ha), Hoa Loi Ward (140.6 ha), Dinh Hoa Ward (78.4 ha), Phu Chanh Ward (248 ha) and Tan Vinh Hiep Ward (103 ha) will provide housing for approximately 300 households that have been required to move to make way for the development.<sup>395</sup> The massive project is scheduled for completion in 2020.

Combining industrial parks with residential facilities and services is a relatively new concept in Vietnam, although it has numerous precedents in neighboring countries. For the Binh Duong Urban Service and Industry Complex, the national government's current policy is aimed at attracting hi-tech and 'green' investors. Many of these investors come from overseas, and, largely due to the national government's 'strategic partnership' with Singapore, Singaporean companies represent a majority among the twenty major investors in Binh Duong New City.<sup>396</sup> Mapletree Group, for instance, is investing more than \$400 million in the 75 ha hi-tech park on the northwestern edge of the New Town.<sup>397</sup> Singaporean consultants are also responsible for the New Town's 1000-bed, state-of-the-art Mein Dong International General hospital. KinderWorld Group, also from Singapore, has begun development of the Eastern International University, a campus on the western edge of the New Town that will eventually accommodate 24,000 students. Another Singapore-based company, Boustead Projects Pte Ltd., has been awarded a \$7 million contract to design and build an electronic power converters manufacturing facility.

Binh Duong New City offers an array of amenities to potential buyers. By combining an administrative center, education, offices, industries and diverse residential choices, the New Town seems to avoid the one-trick pony trap. Because the New Town is so well sited among 28 industrial parks, employment is not expected to be a problem. Binh Duong New City's proximity to HCM City is another benefit, and developers are confident of success. As the city continues to grow over the next ten years, it will be interesting to see how Binh Duong's identity evolves. Will it be a political city? A center of industry? A regional attractor? What will Binh Duong New City really be like? For this brand New Town, the foundations are already in place.

<sup>394</sup> [http://www.binhduong.gov.vn/en/sobanganh\\_detail.php?id=5245&idcat=4538&idcat2=160](http://www.binhduong.gov.vn/en/sobanganh_detail.php?id=5245&idcat=4538&idcat2=160), retrieved on February 4, 2011.

<sup>395</sup> [http://english.chulai.gov.vn/index.php?option=com\\_content&task=view&id=336&Itemid=636](http://english.chulai.gov.vn/index.php?option=com_content&task=view&id=336&Itemid=636), retrieved on February 4, 2011.

<sup>396</sup> Vietnam also has strategic partnerships with India and the United Kingdom.



The mid-range Uni-Town development sits on the northern edge of Binh Duong New City.

<sup>397</sup> <http://www.vnbusinessreg.com/20-giant-groups-commit-invest-binh-duong-city/>, retrieved on January 31, 2011.

<sup>398</sup> See: Saudi Aramco World. November,





Binh Duong is one of the Vietnamese government's initiatives to promote development in the rural areas. The project is part of a nationwide program to develop the agriculture-based economy into a service-oriented future.



# King Abdullah Economic City

## Saudi Arabia

**Client:**  
Saudi Arabia General Investment Authority (SAGIA)

**Developer:**  
Emaar, The Economic City (Subsidiary of Dubai-based Emaar Properties)

**Expected residents:**  
2 million

**Date:**  
2006 - 2025

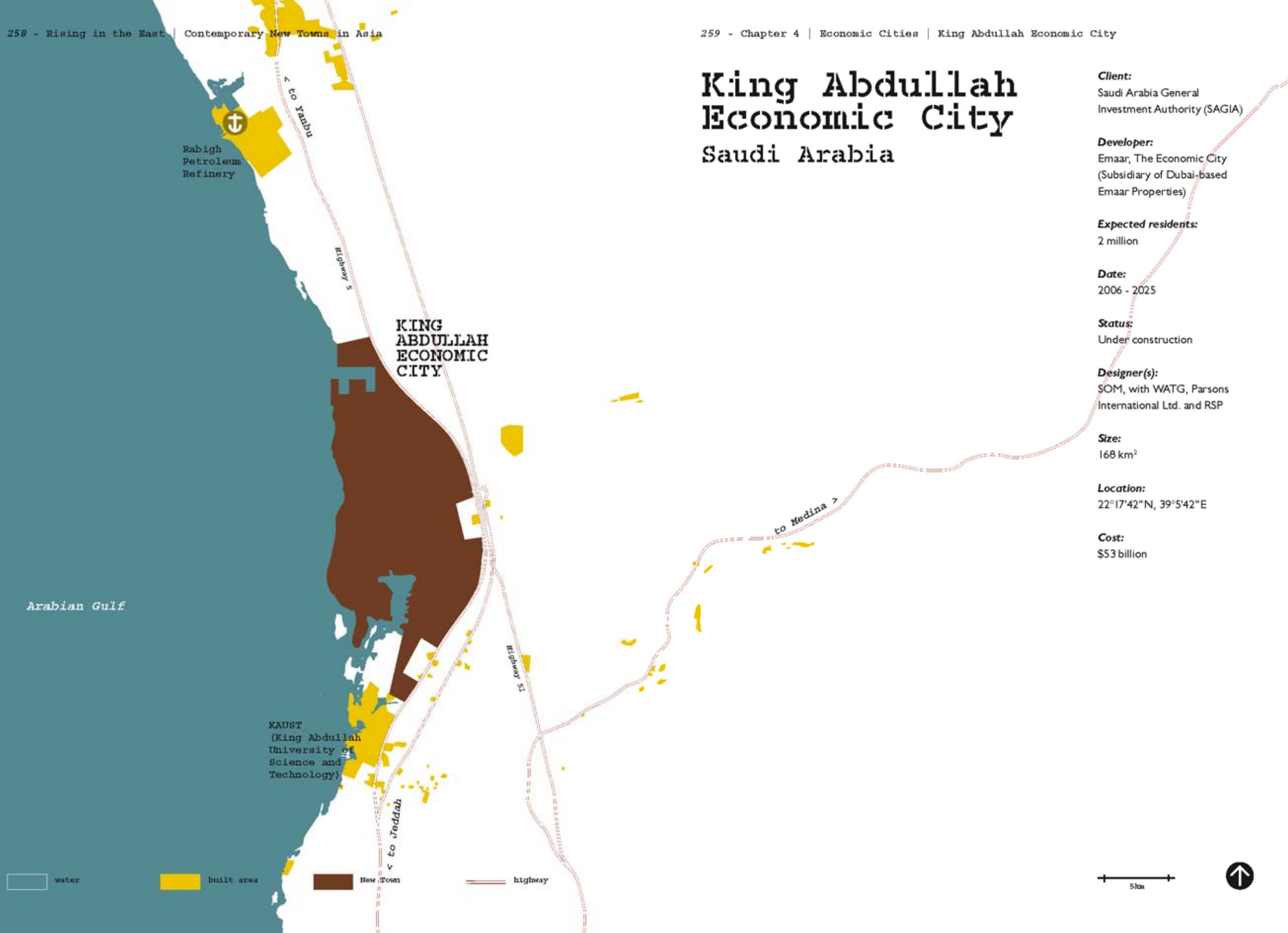
**Status:**  
Under construction

**Designer(s):**  
SOM, with WATG, Parsons International Ltd. and RSP

**Size:**  
168 km<sup>2</sup>

**Location:**  
22°17'42"N, 39°5'42"E

**Cost:**  
\$53 billion



Arabian Gulf

KAUST  
(King Abdullah  
University of  
Science and  
Technology)

KING  
ABDULLAH  
ECONOMIC  
CITY

to Medina >

< to Jeddah

water

built area

New Town

highway

5km







American girl scouts explore the Saudi desert with a Bedouin tracker. The majority of ARAMCO was still owned by American companies, 1961.

SCOUTING—WITH A DIFFERENCE

## Discovery

In 1933, Bert Miller and Krug Henry arrived at the small port of Jubail, in Saudi Arabia. The two American geologists had come to look for oil, and what they found would change the course of history. A crowd awaited them at the customs pier, jostling each other and vying for the best vantage points. For many residents of the small port town, the two Americans were the first foreigners they'd ever seen. As word spread, Bedouins tramped in from the desert for a look at the mysterious strangers. When Miller and Henry finally appeared, their debut was somewhat anticlimactic: the Americans had grown beards and learned some Arabic in preparation for their arrival. They wore Arab clothes to minimize their 'strangeness': long white *thobes* stretched from neck to ankle, and traditional *ghutra* scarves covered their heads.<sup>398</sup>

Using unreliable maps and expert Bedouin guides, the geologists wasted no time setting up an exploratory group. Within days of arrival they set out into the uncharted desert with a caravan of soldiers, automobiles, horses and camels. Miller and Henry were on an urgent mission: finding oil, and securing a contract with the Saudis, could help jump-start an American nation still struggling to recover from the Great Depression. The American explorers were guests of the king, largely because they had the capital and resources to get any potential oil to the world markets. Recently unified, Saudi Arabia was less technologically developed than the United States at that time, and therefore reliant on their expertise. The relationship was mutually beneficial, and both countries stood to gain billions from a successful partnership. The geologists were thus representatives of a bet made by wealthy oil executives halfway across the world. When the investors won that bet five years later, the world would never be the same.

Today, one thousand kilometers across the peninsula from that historic landing, Saudi Arabia is building a city for two million people in the desert along the Red Sea coast. The city will be one of the kingdom's four new Economic Cities: King Abdullah Economic City (KAEC), Prince Abdul Aziz bin Mousaed Economic City, Medina Knowledge Economic City and Jazan Economic City are intended to promote regional development in rural areas, prevent overcrowding in existing urban areas, create jobs for a generation of Saudis, enhance the country's overall global competitiveness, and—critically—help diversify an economy that is now 80% reliant on the petroleum discovered almost 80 years ago.<sup>399</sup>

## The Kingdom at a crossroads

With Britain's assistance, the Kingdom of Saudi Arabia was formally unified under Abdul-Aziz ('Ibn Saud') in 1932, after he conquered rival tribes to claim the title of king. The unification of the fledgling country was

1962, pp. 17-19.

**399** As is well known, the Saudi economy is heavily reliant on oil revenues. More than 80% of the country's budgetary income is produced by the petroleum sector, and oil and gas account for 90% of the country's export earnings. See the CIA world factbook for more information: <https://www.cia.gov/library/publications/the-world-factbook/geos/sa.html>, retrieved on June 25, 2010.

**400** 90% of Saudi Arabians practice



The nearby city of Jeddah as it would have looked to Bert Miller and Krug Henry upon their arrival in 1933, seen here in 1938.





- seaport
- industrial zone
- central business district
- educational zone
- resorts
- residential areas
- desalination
- power plant

2 km



Wahhabism, which is a conservative form of Islam begun in the 18th century by Muhammad ibn Abd al-Wahhab. Wahhabi theology teaches that only the Qur'an and Hadith (narrations of words and deeds of the prophet Mohammed) are considered true religious sources.

**401** Al-Rasheed, M., *A History of Saudi Arabia* (2nd edition), Cambridge University Press, Cambridge, 2010, p. 8.

**402** Ibid.

**403** Discouraged by its long search, Standard Oil of California (SOCAL) sold 50% of the concession to the Texas Oil Company in 1936. After the wells began producing, Standard Oil of New Jersey bought 30% of the company, and Socony Vacuum bought another 10%, (both in 1948) creating an American monopoly on Saudi oil. In 1950, King Abdul Aziz Ibn Saud finally convinced the joint Arabian American Oil Company (Aramco) to split profits 50/50 by threatening to nationalize Saudi oil facilities. The Saudi government did not acquire full ownership of Aramco until 1980, and in 1988 they changed the name from Arabian American Oil



King Abdullah walks with former US President George Bush, Dick Cheney and Colin Powell, 2005.

Company (Aramco) to Saudi Arabian Oil Company (Saudi Aramco).

**404** Al-Rasheed, M. op. cit. p. 149.

**405** Ibid.

**406** The religious backlash even caused the reorganization of state-funded schools.

dependent on the support of local religious authorities, and so observers often claim that *Wahhabism*, the practice of Islam native to Saudi Arabia, was used as a way of 'legitimizing' Saudi rule.<sup>400</sup> For citizens unaccustomed to the idea of a national identity, that authorization still needed to be materialized in the form of clear representatives.<sup>401</sup> As Madawi Al-Rasheed writes in *A History of Saudi Arabia*, the *mutawwa'a* (religious specialists) thus gave credence to Ibn Saud's claim to power and enforced Saudi authority under the pretense of a national strategy to 'Islamize' the people.<sup>402</sup> For this country, politics and religion have been intertwined since the beginning: even today, the Koran is the constitution, every law is a religious interpretation and every jail sentence is doled out by learned clerics.

Shortly after unification, large oil and gas reserves were discovered in neighboring Bahrain. Keen to take advantage of any resources that might be lurking under their own shifting sands, the Saudi government granted oil exploration concessions to Standard Oil of California (SOCAL, known today as Chevron) in 1933. After five years of fruitless searching, crude reserves in commercial quantities were finally discovered in 1938. 'Dammam Number 7', the now famous seventh drill site, changed everything for the young country.<sup>403</sup>

Oil revenues helped lubricate the bumpy years of swift modernization, but interdependencies and negotiations between the rulers and the religious elite continued, and by the 1980s the ascetic interpretations of Wahhabi Islam had become a source of strife within the country. Saudis who embraced traditional, stricter Islamic values and morality were often

members of the same family as those who longed for greater openness and wider freedoms.<sup>404</sup> As the gap increased, religious organizations began to proliferate, and the strong religious rhetoric found a ready audience with people who, according to Al-Rasheed, "had grown frustrated with a truncated modernization, inequality, corruption of the government and close ties to the West, which began to be increasingly defined as the source of social and economic evils."<sup>405</sup> The struggle between modernists and traditionalists appeared at every level of society, sometimes ripping families apart over social or religious disagreements.

The 1980s were not good to Saudi Arabia, and this decade sowed the seeds of social and economic divisions that would continue to grow unchecked into the next millennium.<sup>406</sup> As a result, the early years of the 21st century were tense on many fronts: King Fahd continued to rule, despite increasing frailty, low oil prices strained the national economy, and unemployment continued to rise.<sup>407</sup> After the events of 9/11, tensions became even more pronounced. When it transpired that fifteen of the nineteen hijackers were of Saudi origin, relations with the United States

(an ally since the early days of unification), suddenly became strained on both sides.<sup>408</sup>

Modernists called again for increased political and social freedoms, while reactionary conservatives appealed for a return to 'authentic' Islam. External pressures and internal calls for reform finally had their effect. In 2005, King Abdullah bin Abdul-Aziz Al Saud came to power after acting as *de facto* regent since 1996. Shortly thereafter, the kingdom instituted municipal elections for the first time since 1939. The elections were considered momentous, but their effects were limited. According to Al-Rasheed, "They generated unprecedented euphoria, and reflected the readiness of Saudi society to engage with modern democratic procedures, despite its lack of democratic institutions... The elections brought the trappings of democracy without posing a serious challenge to authoritarian rule."<sup>409</sup> Some of these challenges were overcome, or at least postponed, as oil prices began to rise in 2003, eventually peaking at \$147.30 per barrel in summer 2008, before crashing as the world entered another financial crisis.<sup>410</sup>

Despite the civil unrest that spread across much of the Arab world in spring 2011, most observers doubt that the kingdom is moving towards any form of democratic governance, and analysts say Saudi Arabia is unlikely to see similar revolts in the near future.<sup>411</sup> King Abdullah appears to have preempted some complaints by announcing \$36 billion in extra benefits for Saudis in February 2011.<sup>412</sup>



Mr. Loay Al Kharafi, Chairman and Managing Director of Al Mal Investment Company, explains the plan for Prince Abdulaziz Bin Mousaed Economic City (PABMEC).

### 'The trappings of democracy'

Owning a quarter of the world's known oil reserves does not come without its problems. For modern Saudi Arabia, many of those issues have arisen from the nation's attempt to reconcile its incredible wealth with the prescribed austerity of Wahhabi Islam. When King Abdullah came to power in 2005, he was forced to take a stance on the country's developmental trajectory. The new king chose to walk a tightrope between competing calls for modernization and tradition, and during his reign has slowly shuffled the kingdom towards both economic and political reforms. In a country where 10,000 morality police roam the streets 'correcting' un-Islamic behavior, it has been something of a feat merging the attendant glimmers of 12 million barrels of oil per day with the sober injunctions of Shari'ah law.<sup>413</sup>

But political and economic reforms have indeed managed to trickle through the religious strata: after years of negotiations, Saudi Arabia joined the World Trade Organization (WTO) in 2005. One of the

Maths, science and English classes were all reduced to make room for more religious course in the curriculum, handicapping a generation of young Saudis, many of whom are taught to memorize the Koran by rote, but not to engage in critical dialogue.

**407** Although unemployment has dropped since hovering around 25% from 2003-2005, (male) unemployment is still high at 11.6%. There are no statistics for females. [http://www.indexmundi.com/saudi\\_arabia/unemployment\\_rate.html](http://www.indexmundi.com/saudi_arabia/unemployment_rate.html), retrieved on June 25, 2010.

**408** In Robert Lacey's *Inside the Kingdom*,

a student from Jeddah, Fouad Al-Farhan, describes his impressions of 9/11 in the following way: "So, based on what I can discover, my explanation of 9/11 is down to defective human mechanisms—wackos. And every human society has wackos. Fifteen out of nineteen. We cannot shift the blame. If you subject a society to all those pressures—the rigid religion, the tribe, the law, the traditions, the family, the police, and, above all, the oppressive political system in which you can't express yourself—you are going to end up with wackos. And if you then present them with the doctrine of takfeer, the idea that all their problems come from outside themselves, and that you should try to



destroy people who do not share your own particular view of God, then you are going to end up with some folks who are very dangerous indeed.” Lacey, R., *Inside the Kingdom: Kings, Clerics, Modernists, Terrorists and the Struggle for Saudi Arabia*, Viking Penguin, London, 2009, pp. 227. **409** Al-Rasheed, M. op. cit. p. 249. **410** From the 1980s until 2003 the inflation-adjusted price for a barrel of crude oil was fairly stable, around \$25. After July 2008 prices plummeted—a result of the global economic recession. See: <http://fxc-charts.com/chart/QM/W>

**411** Gupte, E., “Oil prices stable”, *The Wall Street Journal*, February 28, 2011. **412** Evans-Pritchard, A., “Saudi ruler offers \$36 bn to stave off uprising amid warning oil price could double”, *The Telegraph*, February 24, 2011.

**413** The mutawwa’a, or ‘religious specialists’ from the Saudi Commission for the Protection of Virtue and Suppression of Vice, function with almost full impunity from the king and judicial system. Their special relationship with the Saudi monarchy dates back to before the nation was officially formed. Madawi Al-Rasheed writes of those early days: “In the Wahhabi idea of the state Ibn Sa’ud found a conceptual framework crucial for the consolidation of his rule. He was granted legitimacy as long as he championed the cause of the religious specialists (mutawwa’a), becoming a guardian of ritualistic Islam... As long as he allowed himself to be governed by this (Shari’a) law and the way it was interpreted by the Riyadh ‘ulama, he was able to rule.” Al-Rasheed, M., *A History of Saudi Arabia* (2nd edition). Cambridge University Press, Cambridge, 2010, p. 49.

**414** Lacey, R. op. cit. p. 192.

**415** Because the judicial system is still quite young and the business environment remains opaque for foreigners, many internationals choose to do business in Saudi Arabia as part of a joint venture with Saudi partners.

**416** Alsharif, A., “Saudi Elections—Women

team members recruited by King Abdullah to help Saudi Arabia gain membership recalled, “We saw WTO ascension as a vehicle for domestic reform... We could use the new regulations as a pretext. The business establishment was wary of change. But now we could go to them and say, ‘Look guys, sorry. These are the rules. They come from the outside.’ It was a whole change of philosophy.”<sup>414</sup> Since signing the WTO Agreement, Saudi Arabia has consistently pushed for greater foreign investment and a more welcoming business climate in general. In 2007, there was an overhaul of the entire judicial system, with new regulations to allow the formation of a supreme court, a court of appeals and general courts to replace the unchecked powers of the Supreme Judicial Council. In 2008, the Saudi stock exchange (Tadawul) was opened to foreign investors, and it is now technically possible for 100% foreign-owned enterprises to do business in the kingdom.<sup>415</sup>

These and other events have opened the kingdom to widespread modernization and many of the effects of globalization. Women, however, have not benefitted equally from the kingdom’s development. Female participants were totally absent (as both voters and candidates) from the 2005 elections, and have been banned from taking part in the upcoming 2011 elections. Authorities—unconvincingly—cite logistical concerns as the main roadblock for women’s suffrage.<sup>416</sup> Saudi women are not allowed to drive, open bank accounts for their children, or enroll them in schools. In recent years women have claimed the right to own and operate businesses, although the permission of a male guardian is still required to travel abroad or before any surgical procedure.<sup>417</sup> With such strict limitations on the freedoms of women, Saudi Arabia still has a long and likely arduous road ahead of it: the ideological divide between religious traditionalists and those calling for increased rights appears only to be widening.

## Economic Cities

In 2006, as part of the wave of development that followed King Abdullah’s coronation, the government-created Saudi Arabia General Investment Authority (SAGIA) announced the ‘10x10’ scheme. 10x10 was an economic vision intended to raise Saudi Arabia to one of the top ten world economies by the end of 2010. The scheme worked: in the 2009 World Bank *Doing Business Report*, the country has rocketed to number thirteen, up from a 2004 ranking of 67.<sup>418</sup> Observers credit this leap to Saudi Arabia’s continued focus on redistribution, diversification and growth.

As part of the 10x10 scheme, SAGIA initiated a series of four new Economic Cities scattered strategically across the country: King Abdullah Economic City (KAEC), Prince Abdul Aziz bin Mousaed Economic City, Medina Knowledge Economic City and Jazan Economic City. A key part of the diversification plan is the creation of jobs in industries other than the petroleum sector. The Economic Cities are largely conceived as a direct way of combating the kingdom’s mounting unemployment. KAEC alone will create an estimated one million jobs.<sup>419</sup> With an exceptionally

young population, (the median age is 21) finding meaningful employment for frustrated Saudi citizens is critical. Redistribution and growth go hand-in-hand with this approach. The planned communities will support both urban and economic growth; they will offer new industries and diverse employment opportunities; and they will effectively redistribute wealth to less developed regions. As plans progress, the New Towns have become the physical manifestation of the government’s commitment to development.

And these are no average New Towns. KAEC, for example, will house more than two million inhabitants by the time construction is completed in 2025. The namesake city will eventually be the size of Washington, DC, covering a swath of desert previously inhabited by just a handful of villagers.<sup>420</sup> The city has been royally mandated to “become the single greatest enabler of social and economic growth for the Kingdom of Saudi Arabia.” The ambition is emblematic of the continuing struggle between Saudi modernists and traditionalists. Though marketed as “a New Age City, being built today for tomorrow’s generation”, the city’s dedication to traditional Saudi values is also real and prominent.<sup>421</sup>

The 550 mosques throughout the city and dedicated hajj terminal are testament to this sustained devotion. Pragmatically, of course, KAEC’s hajj terminal is also an economic boon for the New Town. Capable of handling 300,000 pilgrims during the hajj season, the terminal will bring profits from transport, hotel occupancy and consumption.

Adjacent to the new city, King Abdullah University for Science and Technology (KAUST) is the result of more than 30 years of royal ambition, and it has the financial backing to prove it. According to Robert Lacey, author of *Inside the Kingdom*, “In spring of 2007, Abdullah offered the state oil company, Aramco, almost any sum of money they needed to pick up his project and make it happen. KAUST already has a \$10 billion endowment to match that of MIT, and is heading for \$25 billion... which would place its wealth in the world second only to that of Harvard.”<sup>422</sup> The city and university may be all new, but as Lacey points out, they are traditional in at least one sense: the land for KAEC “was provided by members of the royal family, Azouzi and Prince Bandar among them, who are all partners in the project.”<sup>423</sup>

And yet even while the kingdom rakes in billions of petrodollars, and faces a national housing shortage, real estate in KAEC hasn’t been immune to the global economic crisis. By mid-2010, “about fifteen percent of homebuyers defaulted on purchases and the company was forced to

Seek Vote”, Reuters, April 26, 2011.

**417** For more information on gender discrimination in the kingdom, see the Human Rights Watch report “Perpetual Minors” from April 19, 2008. Online at: <http://www.hrw.org/reports/2008/saudiArabia0408/>

**418** Other rankings use different methodologies and the kingdom doesn’t



The four Economic Cities are spread across the country.

always perform as well. The 2009-2010 rankings from The World Economic Forum’s Global Competitiveness Report ranked the kingdom 28th in the world. Doing Business Project ranks Saudi Arabia 13th for ‘ease of doing business’ and 140th for ‘enforcing contracts’. The full rankings by the Doing Business Project can be found online at <http://www.doingbusiness.org/ExploreEconomies/economyid=163>, retrieved May 28, 2010. The 2010 Index of Economic Freedom ranked Saudi Arabia as the ‘65th freest economy in the world’ (after France, at 64). <http://www.heritage.org/Index/country/SaudiArabia>, retrieved on May 28, 2010.

**419** Thorold, C., “New Cities Rise from Saudi Desert”, BBC News, June 11, 2008.

**420** Sell, C., “The price of diversity”, *arabianbusiness.com*, May 22, 2010. <http://www.arabianbusiness.com/588717-the-price-of-diversity>, retrieved on June 24,





SOM's masterplan for KAEC wraps a wide strip of industry (orange) around the residential and commercial areas.

2010.

**421** <http://www.kingabdhcity.com/en/Home/index.html>, retrieved on June 25, 2010.

**422** Lacey, R. op. cit. p. 331

**423** Lacey, R. op. cit. p. 273

**424** "Saudi Arabia to allow foreign ownership in KAEC", *arabianbusiness.com*, June 3, 2010. <http://www.arabianbusiness.com/589661-saudi-arabia-to-allow-foreign-ownership-in-kaec>, retrieved on June 24, 2010.

**425** Al-Naim, M.A., "Riyadh: A City of 'Institutional' Architecture", in: Elsheshtawy, Y. (ed), *The Evolving Arab City: Tradition, Modernity and Urban Development*, Routledge, New York, 2008, p. 123.

**426** The full name represented by the acronym ARAMCO was originally the 'Arabian American Oil Company'. The company changed its official title to the 'Saudi Arabian Oil Company' in 1988, yet retains Aramco (or Saudi Aramco) as a shortened name.

delay construction of sixteen towers as customers struggled to make payments.<sup>424</sup> To help face this crisis, Saudi Arabia made the revolutionary move of allowing foreigners to buy property inside KAEC. The city will be the very first place in the kingdom where other nationals can invest individually. After all, while the other Economic Cities may face delays or be forced to scale back, KAEC bears the king's name. It cannot be allowed to fail.

## Precedents

As in many Western countries, Dr. Mashary Al-Naim, Associate Professor of Architectural Criticism at King Faisal University, contends that the 1950s were a major turning point in Saudi urban history. According to Al-Naim, "urban growth was strongly influenced by the economic growth due to the oil boom after WWII. For example, oil income grew from \$10.4 million in 1946 to \$210.7 million in 1952".<sup>425</sup> Such remarkable economic growth in a mere six years contributed to an extraordinary rate of urban expansion. The same decade also saw the emergence of a now ubiquitous housing typology: the Saudi Arabian villa. Originally an American import, the Saudi villa has its earliest native precedent in the homes built by the ARAMCO Home Ownership Plan in Dammam, a town built for the employees of the oil company in the early 1950s.<sup>426</sup>

The ARAMCO Plan required participants to submit a design for their house in order to qualify for a mortgage loan, and due to the lack of local

architects, interested families relied on ARAMCO (usually American) architects and engineers to design their houses. The Home Ownership Plan facilitated this process by creating "several design alternatives for their employees to choose from. However, all these designs adopted a style known as the 'international Mediterranean' detached house".<sup>427</sup> Faisal Al-Mubarak describes the senior employee housing in neighboring Dhahran as "single-family, one-story dwellings built of wood and stucco with sloping roofs, each home surrounded by a lawn and yard and enclosed by a hedge. All units were air-conditioned and adequately furnished. Dhahran's layout was a combination of gridiron style, curving streets and cul-de-sacs, and irregular blocks. Streets and walkways were paved, curbed and lighted, and all serviced with the required community services, recreational facilities and a controlled access to the camp."<sup>428</sup> The description could easily apply to many contemporary American suburbs.

A few years later, in 1957, the Al-Malaz neighborhood in Riyadh famously introduced the villa typology at an urban scale. Sponsored by the Ministry of Finance and laid out along a strict grid, these 754 villas housed civil employees and were seen as 'sanctioned' by the government because of the ministry's involvement. At the time, "Al-Malaz was seen as a symbol of modernity in planning and building material in sharp contrast with the traditional".<sup>429</sup> In a short time, villas became *de rigueur* housing for the wealthy and educated elite. As a contemporary symbol of financial success, this typology continues to be popular, as illustrated by the 56,000 villas under construction in King Abdullah Economic City.

Al-Malaz, Dhahran and the neighborhoods of Dammam can be seen as architectural and urban precedents for the four Economic Cities, but they are also heir to a Saudi legacy of New Town planning. The two most famous Saudi New Towns, Jubail and Yanbu Industrial Cities, were masterplanned in the 1970s as part of a concerted effort to industrialize the kingdom. In fact, the two towns were really more of a byproduct of the Saudi's desire to develop their nation. The site of that fateful landing in 1933, Jubail was planned to grow slowly over time, in organic response to changing needs. Since the New Town's foundations were laid in the early 1980s, Jubail has since grown to a population of 150,000, with military and naval bases, the world's largest desalination plant and the world's fourth largest petrochemical company.<sup>430</sup>

Yanbu was planned around the site of an old village, with heavy and light industry and a modern port. The New Town now has more than 250,000 residents. According to Rashad Reda, a former Deputy Director General at Jubail, both experiments in New Town planning were "a fantastic school for us Saudis. The Jubail experience formed a whole cadre of men who have been able to deal with the outside world and are as good as anyone anywhere. Essentially, Jubail and Yanbu created an educated elite and, in just one generation, helped move us from a Third World nation to a modern industrialized state."<sup>431</sup> Other lessons applied to the current Economic Cities project were also learned through Jubail and Yanbu.

**427** Al-Naim, M.A. op. cit. p. 126.

**428** Al-Mubarak, FA., "Oil, Urban Development and Planning in the Eastern Province of Saudi Arabia: The Case of the Arab American Oil Company in the 1930's-1970's", *Journal of King Saud University*, Vol. 11, Arch. & Planning, pp. 31-51; (AH.1419/1999) p. 39.

**429** Al-Said goes on to describe the gridded neighborhood masterplan with 30 m wide main thoroughfares, 20 m wide secondary streets and minor roads of 10-15 m width. The blocks are 100 x 50 m, with typical lots being 25 x 25 m. The density target for Al-Malaz was 60 people per hectare, with built up private areas covering 53% of the total area and 45% public areas. Al-Malaz can be seen as one of the precedents for the King Abdullah Economic City. The combination of Western planning and local implementation are not new to this area, and in many ways KAEC builds on more than half a century of urban planning history. Al-Said, F.A.M., *The pattern of structural transformation of the Saudi Contemporary Neighbourhood: The case of Al-Malaz, Riyadh, Saudi Arabia*, 39th ISO-CaRP Congress 2003, p. 2.

**430** Marafiq Power and Utility Company boasts the world's largest desalination plant, and singlehandedly provides half of the nation's drinking water. Saudi Basic Industries Corporation (SABIC) is the fourth largest petrochemical company.

**431** Rashad Reda quoted in: Pampanini, A.H., *Cities from the Arabian Desert: The building of Jubail and Yanbu in Saudi Arabia*. Praeger, London, 1997, p. 33.

**432** Including the infamous Oak Ridge, Tennessee. Oakridge was designed as



a self-sufficient city to house the secret construction of the first atomic bombs.

**433** King Abdullah Economic City is the result of years of research and billions of dollars. Planners surveyed more than a thousand of the world's FEZs (Free Economic Zones) in order to establish which might prove useful precedents for the Economic Cities. Out of the 60 most successful case studies, key factors were chosen which could be implemented in a Saudi Arabian context.

**434** <http://www.sagja.gov.sa/Investment-climate/Some-Things-You-Need-To-Know-/Investment-Incentives/>, retrieved on June 25, 2010.

**435** [http://www.som.com/content.cfm/king\\_abdullah\\_economic\\_city](http://www.som.com/content.cfm/king_abdullah_economic_city), retrieved on

King Abdullah's own personal involvement with the first generation of Saudi New Towns stretches back to his time as prince. From 1991, the current king served as CEO of the Royal Commission that spearheaded Jubail and Yanbu, greatly increasing public sector involvement during that time, before handing over control to Prince Saud. The king's involvement with the two Industrial Cities has likely contributed to the streamlined process and execution of the contemporary Economic Cities. Together, these early urban experiments form a model that has clearly inspired subsequent development.

### Modern traditional

American planners also reappear in this story 60 years later, as the heavy-weight group of designers and developers working on KAEC. Among others, this group includes Skidmore, Owings and Merrill (SOM), an architecture and design firm with a long history of New Town planning.<sup>432</sup> SOM is lead designer for the city center. Singapore-based Raglan Squire and Partners (RSP) leads the design team as principle planner, while Parsons International is responsible for the massive industrial development along the northern edge of the city (40 million m<sup>2</sup>). Wimberly, Allison, Tong and Goo (WATG) is responsible for more detailed planning of the resort and residential areas. Saudi-owned Emaar Properties, one of the largest real estate companies in the world, is the new city's master developer.

At a zoning scale, the oblong masterplan is almost symmetrical along its north-south axis. The plan is bounded on its western edge by the King Abdul Aziz Road (Highway 5), with a thick border of industrial terrain insulating the city from the interior desert landscape. Industry and logistics take up more than a third of the total land area of KAEC (57 million m<sup>2</sup>) while residential areas make up a bit less than one third (42 million m<sup>2</sup>). The high concentration of industry, research, institutional and office spaces reinforces the SAGIA commitment to providing ample employment, and eliminates the risk of becoming a bedroom community. In this aspect, KAEC's programmatic proportions are relatively unusual for a New Town, and, as in Binh Duong New City, should ensure a higher degree of autonomy.

This intentional focus on employment is due in large part to the Arabian Peninsula's need to diversify an oil-based economy. As a Free Economic Zone (FEZ), King Abdullah Economic City represents a large part of this strategy.<sup>433</sup> In addition to investment opportunities in the petrochemical sector, KAEC will support steel, glass, ceramic and plastic industries. In a sustained effort to further diversify both the local and national economies, KAEC will also offer investments in knowledge-based industries, including health and education. According to SAGIA's website, "doing business in KAEC is given a special impetus with the business friendly regulations instituted by Saudi Arabian government investment authority (SAGIA). This includes 100% foreign ownership, minimal corporate tax, no capital requirement or restrictions on repatriation and so on."<sup>434</sup>

The seaport at the far northern end of the city will include a bulk solid cargo terminal as well as a container terminal. The seaport will be surrounded by industrial terrain including logistics, plastics, incubators and an aluminum smelting plant. The heavy industry area then transitions through to an R&D and institutional area, which acts as a buffer between the factories and the central business district (CBD) island. Mirroring the educational districts on the southern side of the CBD will be a 'souk' area with modern malls and traditional-style market areas, as well as a corniche running along the natural harbor. Across the water, another large residential area will be situated just behind the separate port devoted to hajj pilgrims.

August 17, 2010.

**436** SOM's experience with New Town planning stretches back to the 'atom bomb city' of Oak Ridge, Tennessee, completed in 1949. Oak Ridge is famous as the setting for the US government's top-secret Manhattan Project, the development of the atomic bomb. The urban design is characterized by an organic layout, with curving streets and cul-de-sacs in quiet neighborhood clusters. Modular, pre-fab



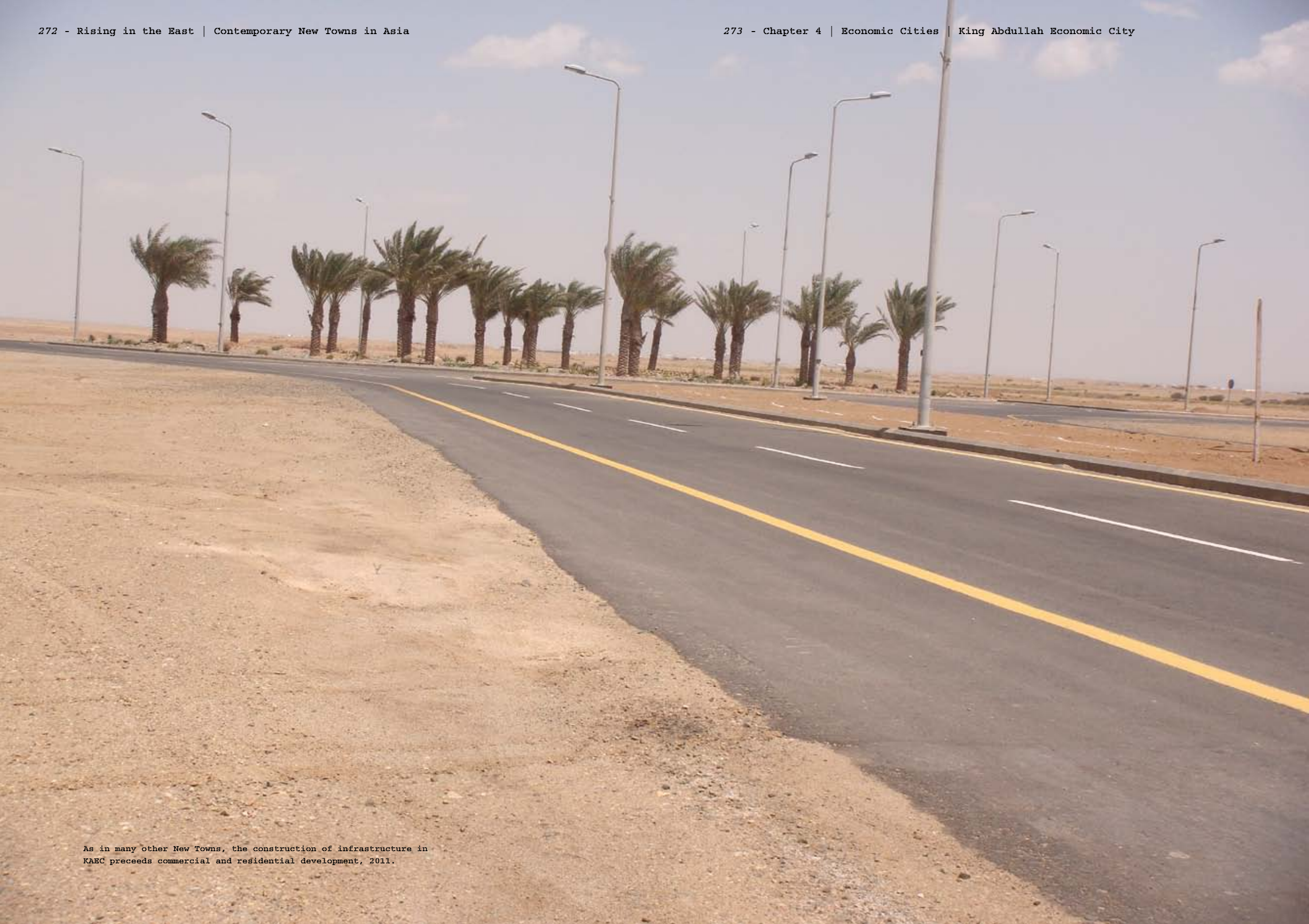
SOM's plan will transform the oceanfront into shopping boulevards and beachfront resorts.

Because of its proximity to Mecca and Medina, the new international airport will also have terminals dedicated solely to hajj pilgrims. These terminals, as well as the dedicated hajj seaport, will be adjacent to facilities specifically designed for the pilgrims, including hotels and hospitals. KAEC's close relationship with the pilgrimage sites is evident in the masterplan. The main axes of the city are deliberately oriented towards Mecca and Medina, with local mosques organized along the same lines.<sup>435</sup> In some ways, KAEC will become a very important gateway for foreign hajj pilgrims. Entering the new city will be their first step on Saudi soil, and the experience is designed to make a lasting impression.

Accordingly, the plan for downtown KAEC by SOM is straightforward, but striking.<sup>436</sup> The almond-shaped CBD sits precisely in the center of the

homes gave the town a modern look. Due to its secret classification, Oak Ridge did not appear on maps, and was surrounded by a high fence and several guard towers. **437** The thobe (or thawb) is the traditional white clothing worn by Saudi





As in many other New Towns, the construction of infrastructure in KAEC precedes commercial and residential development, 2011.





SOM's proposal for the KAEC marina combines speedboats and a Miami sunset with a mosque.



The majestically-scaled central axis, approximately 70 m wide, is lined with shops and offices. The axis terminates in the city's main mosque.

city, encircled by a large canal, and ringed across the water by a six-lane road. The waterway physically divides the business district island from the surrounding residential and commercial areas. In renderings, men in wind-blown *thobes* drive speedboats through the sparkling water, giving the scenes a feeling of Miami or St. Tropez.<sup>437</sup> The northern tip is occupied by a colossal stadium, which then gives way to a fairly dense urban fabric. An axial green space cuts the island in half, beginning at the stadium and terminating at an enormous mosque. The axis is rendered as a 100-meter-wide space paved in light stone and dotted with water sculptures and fountains. Three rows of palm trees line each side of the water, presumably to provide shade from the scorching sun.

The CBD is divided into mono-functional office, financial and commercial districts, resort areas, and government facilities.<sup>438</sup> The urban plan is delineated with waterways that "divide the city center into four major districts, each of them in possession of high-value waterfront properties that will promote trade and tourism. Tall buildings rising 60 to 100 stories will define the skyline and help to support the 300,000 new jobs that the city center is expected to create."<sup>439</sup> The CBD will eventually boast 3.8 million m<sup>2</sup> of office, commercial and hotel space. Plans for the 'green' center include a central park with a zoo and botanical gardens. According to SOM, "Public open spaces throughout the city will house schools, mosques, and markets. To support this dense, sustainable, and economically viable network, the city's transit system will integrate foot traffic, cooling canals, a hierarchy of roadways, and public transportation."<sup>440</sup>

## Housing

While the CBD occupies the center of the city and the industrial terrain runs along the western edge, KAEC's eastern coastline on the Red Sea gives residents a panoramic sunrise every morning. The beach area will be dedicated to resort development, capitalizing on the eternal appeal of white sand and clear water.<sup>441</sup> Just behind the resorts, a wide swath of residential neighborhoods runs between the leisure and business districts.

In the traditional, vernacular neighborhood unit, some degree of local autonomy, social homogeneity, and proximity to religious and public buildings all play important roles.<sup>442</sup> These values resurface in King Abdullah Economic City, although the built form has been reinterpreted to accommodate changing lifestyles. According to the city's website, "each city district is designed to be a complete social unit with homes, schools, medical facilities, offices, shopping and entertainment all integrated into one community."<sup>443</sup>

men. The red-checked headdress is known as a *ghutra* an *iqal*, (or *gutrah*).

**438** [http://www.som.com/content.cfm/king\\_abdullah\\_economic\\_city](http://www.som.com/content.cfm/king_abdullah_economic_city), retrieved on August 17, 2010.

**439** Ibid.

**440** Ibid.



Designed by SOM, Rabigh International Stadium at the edge of the CBD juts into the dividing waterway.

**441** The decision to reserve the coastline for resort developments is not surprising, but questions remain about the way the beaches will be used. In most of the images presented as marketing material, Saudi men and women stroll along fully clothed. No word yet on how this might mesh with traditional Western beach use. In other Saudi coastal cities women swim in full abayas while men can strip down to long shorts (although many keep their shirts on). Private beaches, women's beaches, or beach clubs might offer different clothing options, but swimming pools are still officially 'for men only'.

**442** Two examples of the traditional Arab neighborhoods are the Al-Housh and Al-Hara neighborhood systems. The Al-Housh system is typical of traditional Saudi towns in the western part of the country. According to Prof. Habib M. Alshuwaikhat of King Fahd University, "Al-Housh is deemed to be a planning unit on both the physical and social levels." The physical planning is characterized by multiple houses organized around a shared





The villas at KAEC are arranged in a suburban layout.

courtyard. A single gate gives access to the courtyard space, and thus, the surrounding houses. The Al-Housh neighborhood is therefore a semi-private, semi-controlled unit, and Alshuwaikhat points out that “the open courtyard heightens the social relations between residences as it provides a common space where people meet together and share social events (weddings, death, etc.), children play safely and women gather in certain corners.” The Al-Hara neighborhood unit, on the other hand, is a dense collection of houses accessible only by a series of narrow alleys. Al-Hara typically have between 15 and 60 units, and this restricted “number of residences... provide a sense of identity and local control over [the] environment.” Multiple Al Hara units are known collectively as Al Darb. Because

Bay la Sun, Esmeralda and Hawadi Village are three housing communities scheduled for construction during Phase I. At Bay la Sun (a mixed-use development currently under construction), “the elegantly designed luxury apartments come in different sizes and are set amidst placid water canals. Bay La Sun will also offer residents a host of amenities including leisure, retail outlets, schools, mosques, medical centers and community areas. Twenty-four hour security and maintenance support are standard.”<sup>444</sup>

Hawadi Village is targeted towards the middle class. According to Mr. Fahd Al-Rasheed, Chief Executive Officer of Emaar E.C., “Hawadi is designed to be the home of professionals; engineers, doctors, teachers, and specialists in all fields—along with their families, who will work in the City or in neighboring areas. It is being developed with all their needs and aspirations in mind—including affordability. With Hawadi Village, King Abdullah Economic City proves that it does not only target high-income professionals.”<sup>445</sup>

After Hawadi Village received ‘The Best Residential - Future Award’ at ‘Cityscape Jeddah’ in 2009, developers saw interest in the new development skyrocket. In order to accommodate growing demand, KAEC



Villas with vaguely Arabian architectural influences line the golf course.

developers Emaar Economic City are now bringing forward the selling date of the 22,000 homes.<sup>446</sup> Within Hawadi, according to a rosy press release, each neighborhood “surrounds a mosque, recreation center and small retail shops, which turn into a meeting and socializing hub for the neighbors. Almost every daily need is within walking distance (300 m in most cases) which helps build the sense of belonging to a neighborhood and a community.”<sup>447</sup>

### But is it enough?

Phase I, due for completion in 2011, includes a large industrial zone, the first framework for the port, Esmeralda residential community and Bay la Sun Business Park. The industrial area will focus on logistics and distribution centers as well as housing for construction workers. These first residential areas will include waterfront apartments and resort-style developments. Phase 2 will extend the residential area along the coastline (connecting Esmeralda and Bay la Sun), and expand the industrial area. A new housing development at the southern edge of the city will be built, and the first half of the port will be completed. During Phase 3, the industrial area will be further developed and more commercial and leisure

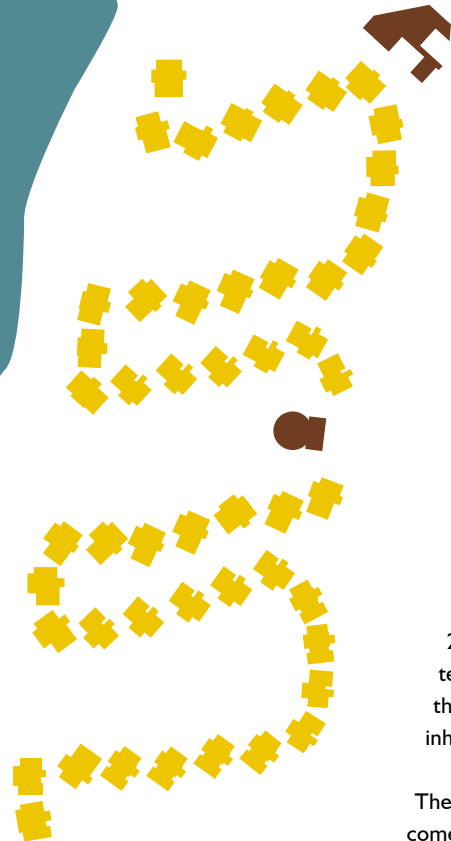
of the extremely limited accessibility, Al Darb are easily defensible—a valuable asset in traditional Saudi town planning. See: Alshuwaikhat, H. “Planning the 21st Century Urban Neighborhood: Learning from Previous Concepts”, *Journal of King Saud University, Arch. & Planning*, Vol. 11. (1419/1999), pp. 17-19.

<sup>443</sup> <http://www.kingabduhcity.com>, retrieved on March 17, 2010.

<sup>444</sup> Press release, “Emaar.E.C unveils Bay La Sun Village at King Abdullah Economic City”, [ameinfo.com](http://www.ameinfo.com), September 4, 2007. <http://www.ameinfo.com/130847.html>, retrieved on June 10, 2010.

<sup>445</sup> Press release “Large crowds gather around Hawadi model after winning ‘Best Residential - Future Award’ in Saudi Arabia”, [ameinfo.com](http://www.ameinfo.com), June 27, 2009. <http://www.ameinfo.com/201876.html>, retrieved





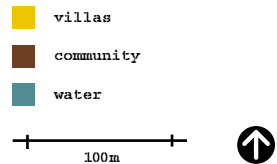
Beachfront villas at KAEC are adjusted so that each villa has a view of the sea.

facilities will fill in the urban fabric. By Phase 4, scheduled for completion in 2025, the massive industrial terrain will be complete and the city will house two million inhabitants.

The two million inhabitants will come, and they will most likely be looking for work. After years of living off government handouts, young Saudis are eager to enter

the workforce and start their careers. Until now, job creation has proven to be a problem for the kingdom. However, because Saudis aren't taxed (aside from Muslim *zakah*, or alms), and because the government has been especially successful at building a strong welfare system (including free health care and education), public discontent has been relatively controlled. As Al-Rasheed writes, "The Saudi leadership used oil wealth and development projects to protect itself from internal criticism. Saudis were brought up to appreciate security (and) prosperity... which they accepted as a substitute for political participation and democratization."<sup>448</sup> That same security and prosperity is proudly displayed in KAEC. Hopefully, a new attitude towards employment will be equally noticeable.

Of course not everyone is pleased with KAEC's lush extravagance. In fact, some detractors have criticized the multi-billion-dollar investment as 'gaudy' and 'non-Saudi'. In 2007, the Governor of the Saudi Arabian General Investment Authority, (SAGIA) Amr Al-Dabbagh, defended the expenditure by reminding the public of the Economic Cities' combined purpose. "The impact of these [four] economic cities by 2020 is \$150 billion in contribution to GDP growth, 1.3 million jobs to be created, and to accommodate 4.8 million of the total population."<sup>449</sup>



on June 25, 2010.

<sup>446</sup> Ibid.

<sup>447</sup> Ibid.

<sup>448</sup> Al-Rasheed, M. op. cit. p. xii.

<sup>449</sup> Qusti, R., "Saudi Arabia to Build Two More Economic Cities This Year", Arab News, April 29, 2007.

<sup>450</sup> <http://www.rediff.com/money/2006/mar/22sld2.htm>, retrieved on September

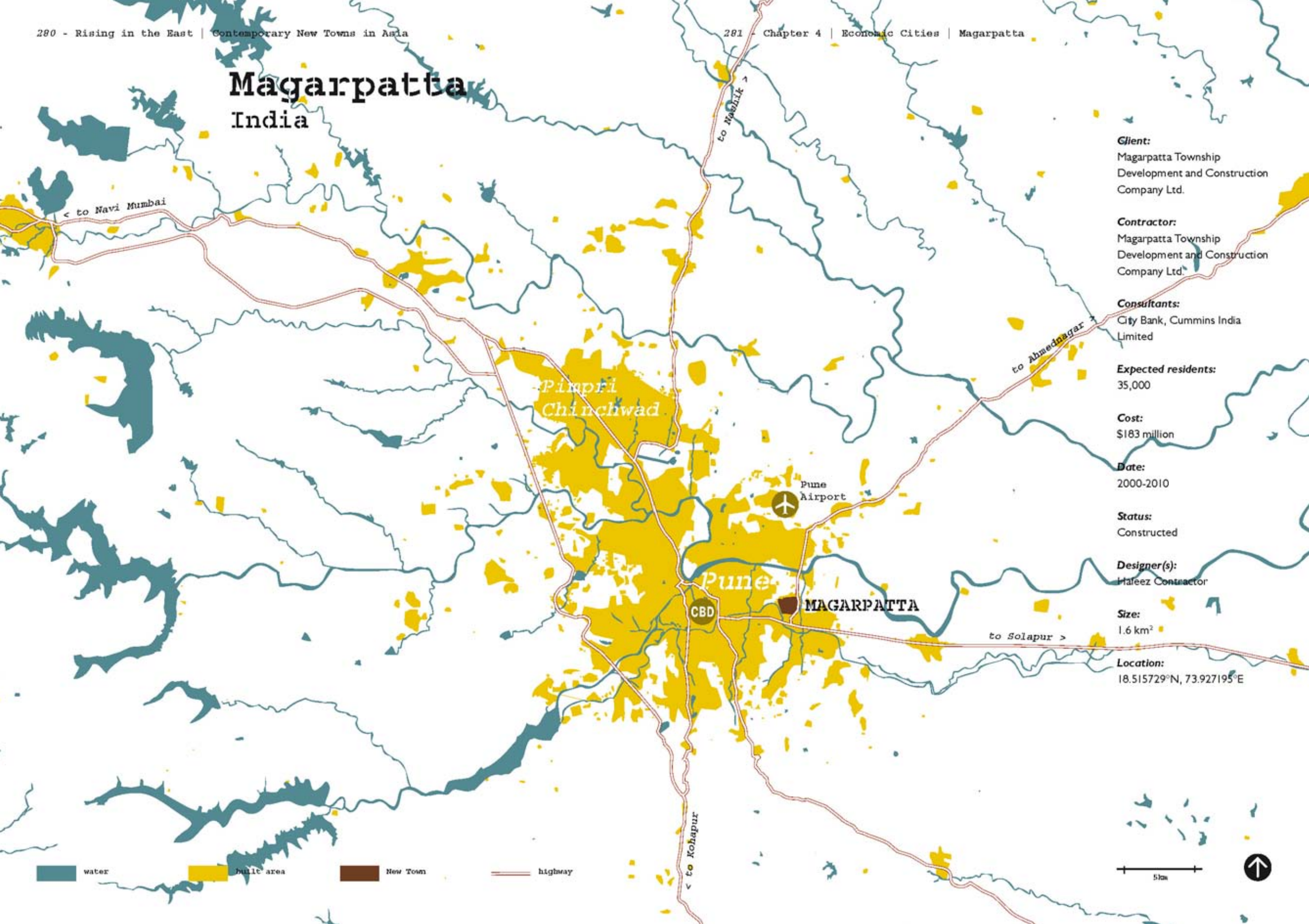


Looking east from the Phase 1 Bay la Sun and Esmeralda developments, one of the canals leads back to the eastern edge of KAEC.

If jobs are a certainty, other questions about the reality of life inside KAEC remain. For potential foreign investors, one such question might be: how will this New Town combine an incoming expat population with the conservative teachings of Wahhabi Islam? Will this giant city in the desert be able to attract sufficient workers and industries? And perhaps most critically: can the Economic Cities help diversify the economy enough to alleviate the country's reliance on oil profits? With an almost unimaginable personal investment on the line, the royal family is hoping for a resounding 'yes'.



# Magarpatta India



**Client:**  
Magarpatta Township  
Development and Construction  
Company Ltd.

**Contractor:**  
Magarpatta Township  
Development and Construction  
Company Ltd.

**Consultants:**  
City Bank, Cummins India  
Limited

**Expected residents:**  
35,000

**Cost:**  
\$183 million

**Date:**  
2000-2010

**Status:**  
Constructed

**Designer(s):**  
Hafeez Contractor

**Size:**  
1.6 km<sup>2</sup>

**Location:**  
18.515729°N, 73.927195°E

water built area New Town highway

5km ↑





### 'The Pride of Pune'

Just ten years ago, what is now the most famous township in India was fields of sugarcane. The much-lauded rags-to-riches story began in the early 1990s, when hundreds of members of the Magar clan were under pressure to sell their farmland to developers. Property developers were buying up massive swaths of land from drought-thinned farmers, and turning a profit unimaginable to the local community. While land classified for agricultural use around Pune is only worth about Rs 5 lakh (\$10,790) per acre, once developers obtain approval for land reclassification as 'urban development' that number might grow to as much as Rs 50 lakh (\$1,079,000) per acre.

Magarpatta lies in Pune District, Maharashtra, just five kilometers from the sprawling city of Pune. The farming community started to notice the city slowly leaking over its borders, drawing closer each day as urban sprawl began to close the gap between them. Developers had already begun offering buyouts in neighboring villages. In the face of these temptations, some farmers did sell, and their quick profits seemed enviable—until the money ran out; leaving the farmers destitute and landless.

Satish Magar noticed the two trends and decided to do something unprecedented. In 1993, the educated farmer presented his ideas to other members of the Magar clan and unrelated neighbors. Magar suggested that the farmers create a joint company to develop the land themselves, thereby circumventing the wily developers. The idea was met with hesitant optimism. After all, what did 140 farming families know about developing a city from scratch?

When asked about his initial idea for the city, Satish Magar (now the managing director of Magarpatta Township Development and Construction Company) replied, "I knew that Pune was getting urbanized. I did not want some government order grabbing our land under the garb of developing it... In 1992-93, a lot of unauthorized constructions came up all over the place. It was chaotic. I decided to develop a township in reaction to this... We told the government that we wanted to develop an integrated township... I spoke to (the well-known Mumbai architecture firm) Hafeez Contractor and also to local architects. I read the Town Planning Act. I found out how much area has to be left open. We told the architects and engineers what we wanted and they gave us this plan."<sup>450</sup>

After the farmers set up the Magarpatta Township Development and Construction Company, (MTDCC) the company hired Hafeez Contractor to develop a masterplan for the city.<sup>451</sup> The plan was submitted to the Pune Municipal Corporation and the government of Maharashtra in 1993, and approvals came through in 2000.<sup>452</sup> The seven long years between submittal and approval gave the farmers plenty of time to reconsider their impulsive choice.<sup>453</sup>

10, 2010.

**451** Such a plan must be ready before applying for permission for a change of land use from government bodies. This step is generally undertaken by developers after they buy land from farmers. If changes are approved, land values can rise by as much as 1000%.

**452** Ahluwalia, I.J. and Nair, R., "Magarpatta: Building a City with Rural-Urban Partnership", [www.indianexpress.com](http://www.indianexpress.com), first posted on May 26 2010. <http://www.indianexpress.com/news/magarpatta-building-a-city-with-ruralurban/623701/>, retrieved on September 9, 2010.

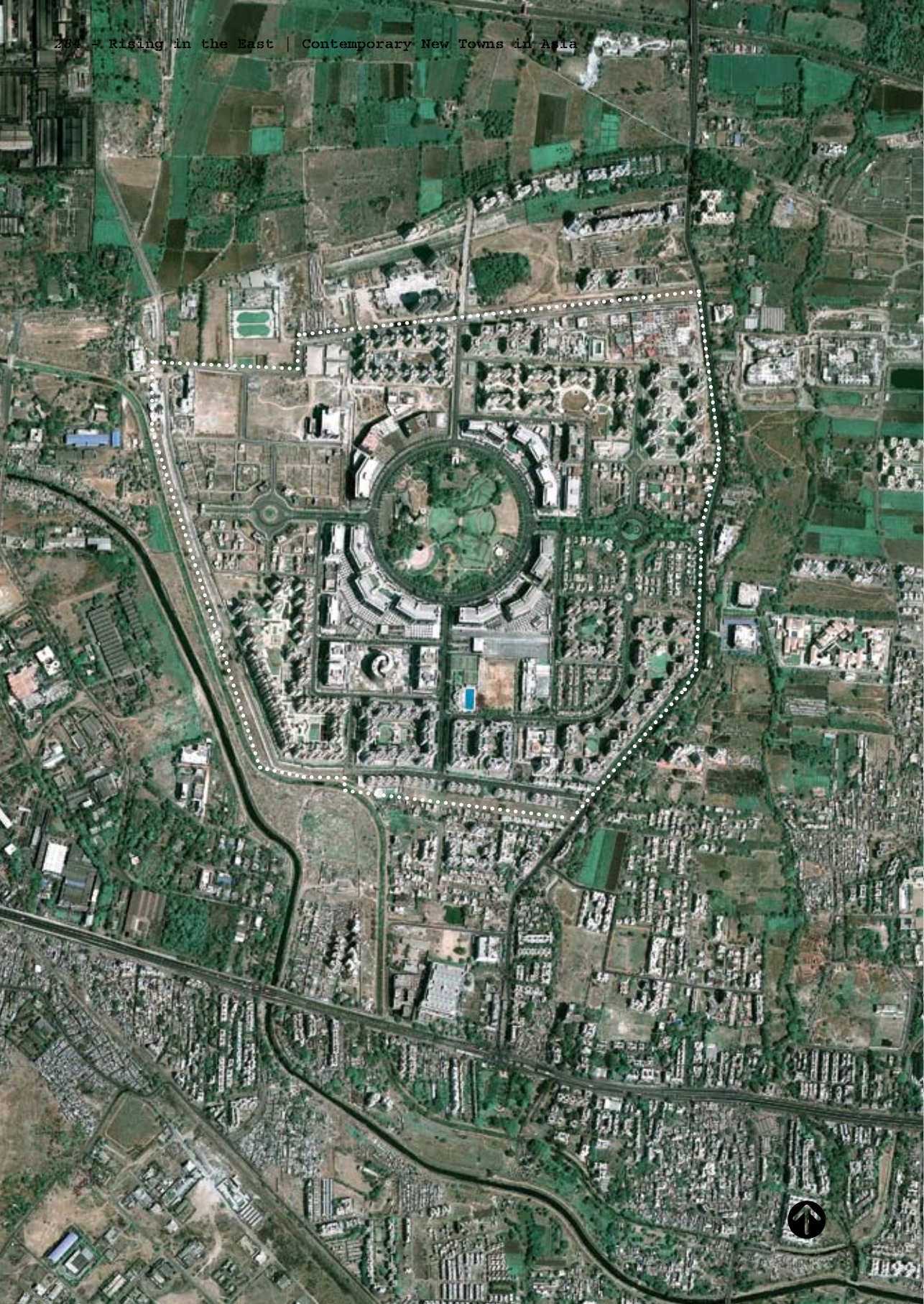
**453** The farmers' blind trust in Mr. Magar may have had something to do with his family history. During the 1960s, Mr. Magar's uncle, Annasaheb Magar (a local political heavyweight) helped develop the twin industrial township of Pimpri-Chinchwad, also in Pune District. Pimpri Chinchwad is now one of the richest municipal corporations in Asia.

**454** For more information on India's governmental structure, see <http://www.>



Farmer-turned-developer Satish Magar (far right), participates in a festival in Magarpatta.





- SEZ
- cyber city
- office
- villas
- row houses
- apartments
- retail
- education
- green

200m





india.gov.in/.

455 The conference was organized by India's Association of Municipalities and

## The republic

Officially, India is considered a sovereign, socialist, secular, democratic republic.<sup>454</sup> Legislative power rests with a bicameral parliament, while the president wields executive power. The judicial branch includes The Supreme Court of India, state-level High Courts, and district-level District and Session Courts. After winning independence from the British in 1947, the Republic of India officially began when the Constitution of India came into effect on January 26, 1950.

Under Prime Minister Jawaharlal Nehru's administration (1952-1964) the young Republic introduced a series of social reforms, including expanding the rights of women, outlawing caste discrimination and making education a national priority. The economy started out in a socialist model, with a great emphasis on the nationalization and development of heavy industries and government benefits for agrarian workers.

During the 1970s, Nehru's daughter, Indira Gandhi, served as prime minister and pushed through more socialist reforms, including the nationalization of banks. Gandhi's government also signed a twenty-year friendship treaty with the Soviet Union, which would become India's largest trading partner in the following decades. During the 1980s, India

faced internal turmoil and violence on several fronts. Indira Gandhi was murdered by her own Sikh bodyguards in 1984, some say as a result of police brutality against the Sikh community. Gandhi's murder earned sympathy votes for her son, Rajiv Gandhi, who became the following prime minister with the largest parliamentary majority in Indian history.

The next Gandhi administration sweetened the country's relationship with the United States and pushed for development in telecommunications, science and the IT sector, setting the stage for India's IT boom in the early 1990s. Rajiv Gandhi was killed by a female Tamil Tiger suicide bomber in 1991.

The current prime minister, Manmohan Singh, is the first Sikh to hold this position. He is also widely credited for the economic liberalizations that have contributed to India's swift rise over the last decade. While serving as finance minister under Narasimha Rao, Singh

began the privatization of bulky government-owned industries, increased foreign investment, reduced taxes and introduced the concept of Special Economic Zones (SEZ)—a development model which has literally changed the face of India. Singh has continued these policies as the current prime minister, which helped India achieve a 5.4% GDP growth rate in 2009—even in the midst of a global financial crisis.



SEZs in India as of 2008. Note the density of SEZs in Maharashtra State.

In this religiously pluralistic, ethnically diverse and multilingual nation, economic development has brought with it concurrent urbanization. As people flock to the urban centers in search of better employment opportunities, these so-called megacities are pushed their limits. Speaking at a seminar on Harmonious and Sustainable Cities in March 2009, India's Secretary for Urban Development, Mr. Ramachandran, said that "even though India had the second-largest urban system in the world, with 310 million people and 5,161 cities and towns, the urbanization was characterized by widespread poverty, poor urban infrastructure, and environmental degradation. Less than 60% of the households in India's cities have sanitation facilities, and less than half have tap water on their premises. About 40 million people are also estimated to live in slums."<sup>455</sup>

India's swift and uncoordinated urbanization has brought with it a number of obvious problems. While many forecasters predict India's imminent arrival as a global economic superpower, the country continues to struggle with a national strategy to control and organize urbanization. New towns (along with their IT brothers and SEZs) look poised to become a key part of that solution.

## No stranger to New Towns

India's post-colonial urban experimentation found outlets in the famous New Towns of Chandigarh, Bhubaneswar and Gandhinagar, but the majority of urban developments between independence in 1947 and today were unplanned expansions. This uncontrolled construction has resulted in developments built without national approval that consequently may not apply for public funds to support infrastructure and housing. In fact, the situation was so convoluted that India's Ministry of Urban Development was not even created until 1992. According to the country's current five-year plan (2007-2012), 23 million residential units are required to house the population currently living in makeshift shantytowns.<sup>456</sup> Over the past decade, India has moved forward with a national strategy designed to relieve the various pressures on urban infrastructure produced by informal construction. According to the Eleventh Five-Year Plan (2007-2012), unplanned urban expansion "has led to tremendous pressure on civic infrastructure systems, water supply, sewerage and drainage, uncollected solid waste, parks and open spaces, transport, etc. It has also led to deterioration in the quality of city environments. In several cities, the problems of traffic congestion, pollution, poverty, inadequate housing, crime, and social unrest are assuming alarming proportions."<sup>457</sup>

In order to combat these issues, the Eleventh Five-Year Plan recommends the formation of a National Urbanization Policy to direct "future urban growth in an equitable and sustainable manner."<sup>458</sup> The current plan also supports the construction of satellite towns on a nationwide scale as a means of controlling overpopulation in megacities. According to the Planning Commission, "the other settlements located in the vicinity of the mother city are to be developed as satellite/counter magnets to reduce and to redistribute the population and population influx."<sup>459</sup>

Development Authorities in partnership with UN-HABITAT. See: <http://www.unhabitat.org/content.asp?cid=6398&catid=5&typeid=6&subMenuId=0>, retrieved on October 13, 2010.

456 All of India's 11 Five Year Plans are available for download in pdf form at <http://planningcommission.nic.in/plans/planrel/fiveyr/welcome.html>.

457 Eleventh Five Year Plan, (2007-2012) Planning Commission, Government of India, p. 394. Available online at: <http://planningcommission.nic.in/plans/planrel/11thf.htm>, retrieved on October 2010.

458 Op. cit. p. 395.

459 See: <http://planningcommission.nic.in/plans/planrel/fiveyr/welcome.html>.

460 See: <http://www.sezindia.nic.in/about-asi.asp>, retrieved on October 18, 2010.





Dense housing blocks at the periphery of Magarpatta mark the boundary of the New Town.

**461** See: <http://www.sezindia.nic.in/about-introduction.asp>, retrieved on October 18, 2010.

**462** 67% of the Western Corridor's construction costs will be funded by a loan from the Government of Japan. The Eastern Corridor will be jointly funded by the World Bank and Asian Development Bank, among others. See <http://dfccil.org/> for more detailed information.

**463** Mishra, A.R., "Freight Corridor Aims

Although Magarpatta is a self-organized New Town, the integrated township was really at the cusp of what has since become a government-approved New Town building boom. As of October 2010, 579 SEZs have been carved out and formally approved since the SEZ Policy was adopted in April 2000.<sup>460</sup> While not all SEZs can be considered true New Towns, many of these developments include large residential, commercial and industrial zones, effectively making them semi-autonomous urban entities. Some of the economic benefits of the SEZs include duty-free imports, various tax exemptions, and exemptions from customs and excise duties. The main objectives of these economic oases are: "[the] generation of additional economic activity; promotion of exports of goods and services; promotion of investment from domestic and foreign sources; creation of employment opportunities; and the development of infrastructure facilities".<sup>461</sup>

Indian Railways is set to profit from these developments by constructing a massive new railroad project across the country.<sup>462</sup> The Eastern and Western Dedicated Freight Corridors (DFC) form an upside-down 'V' through the country, stretching south from Ludhiana in Punjab. The Eastern Corridor will run through the states of Haryana, Uttar Pradesh and terminate at Son Nagar in Bihar. The Western Corridor will travel south from Dadri to Mumbai, passing through the states of Delhi, Haryana, Rajasthan, Gujarat and Maharashtra along the way. The construction of these two Corridors is the nation's largest single infrastructural development to date. When completed, the two Corridors will span over 2800 km, connecting existing towns and cities, logistics hubs, and new urban developments along the way. The Dedicated Freight Corridors will capitalize on India's growing international trade as well as

the increased freight traffic produced by developments along its route. Many developers see the DFC as an opportunity for efficient and cheap heavy transport, making the route very attractive for new SEZ and township developments. Today, at least three new Smart Cities are planned for the Western Corridor, with the idea of creating a series of industrial hubs along the railway.<sup>463</sup>

This nationwide development has been made possible by a key policy, adopted in 1894, called the Land Acquisition Act. Similarly to the Chinese government's all-encompassing Land Use Rights System, the Land Acquisition Act allows the Indian government to claim eminent domain over any land of its choosing. The effects of this Act were exacerbated by the Urban Land Ceiling Act of 1976, which limited the amount of land available for purchase by individuals and private companies, effectively giving government bodies a monopoly on large tracts of land.<sup>464</sup> After a series of protests, the Urban Land Ceiling Act was later repealed. According to political columnist Jayant Sinha, "In India, the central and state governments have been applying the Land Acquisition Act for decades to procure land for building rail lines, highways, power plants and medical facilities. There have been many problems associated with compensation and resettlement. Most importantly, the government has been able to classify virtually any acquisition of land as being in the public interest. With the advent of the SEZs and public-private partnerships, eminent domain is being abused on a vast scale."<sup>465</sup>

### Farmers without farms

India's agrarian sector currently employs 52% of the country's total workforce.<sup>466</sup> According to agriculture policy analyst Devinder Sharma, the government's current policy initiatives promote privatization of natural resources, corporate takeover of farmland, and the integration of Indian agriculture with the global economy—a combination he calls "the hallmark of the neo-liberal economic growth model."<sup>467</sup> The government's desire to move the country from an agrarian economy towards IT and industry has left the farmers in much the same state as displaced Chinese agricultural workers.

Sharma suggests that the prime minister's new 'rehabilitation policy' for farmers will contribute to the 400 million people displaced by land acquisitions—a group he calls "agricultural refugees".<sup>468</sup> Sharma argues that land is being accumulated in the hands of an elite few, with "chief ministers acting as property dealers, [and] farmers being lured to divest control over cultivatable land."<sup>469</sup>

Recently in Vidarbha, the eastern region of Maharashtra state, farmers have been committing suicide in uncommonly large numbers. The

to Host Smart Cities", [www.livemint.com](http://www.livemint.com), April 29, 2010. <http://www.livemint.com/2010/04/29232641/Freight-corridor-aims-to-host.html>, retrieved on October 18, 2010.

**464** According to the Jawaharlal Nehru National Urban Renewal Mission, under the Ministry of Urban Development, "The objective of the Urban Land (Ceiling & Regulation Act), 1976, (hereafter ULCRA) was to facilitate the availability and affordability of urban land by increasing its supply in the market and by establishing an efficient land market. The ULCRA provided for imposition of a ceiling on both ownership and possession of vacant land; acquisition of excess vacant land by the



A typical street scene in the nearby metropolis of Pune.

state government with powers to dispose of the land for the common good; payment of compensation for the acquisition of the excess land; and granting exceptions in respect of certain specific categories of vacant land. The ULCRA came into force in 1976 in 64 urban agglomerations spread over 17 states and three union territories (UTs) and covered towns with a population of more than two lakh as per the 1971 Census." See: [www.indiaurbanportal.in/JNNURM/.../Repeal\\_ULCRA.pdf](http://www.indiaurbanportal.in/JNNURM/.../Repeal_ULCRA.pdf), retrieved on September 13, 2010.

**465** The Land Acquisition Act of 1894 gave government bodies the right to





Magarpatta is oriented around a large central green space. Office and IT spaces form a perfect ring around the park. Housing, schools and amenities are located outside the circle.

assert 'eminent domain' over any land of their choosing. Because of the problems resulting from this land grab, two bills were introduced to Parliament in 2007: The Land Acquisition (Amendment) Bill, and the Resettlement and Rehabilitation Bill. Many consider these bills to be too little, too late for the thousands of farmers that have been displaced. Sinha, J., "A Case of Public Acts and Private Ambitions", in: *Outlook Business*, September 7-20, 2008, pp. 30.

<sup>466</sup> <https://www.cia.gov/library/publications/the-world-factbook/geos/in.html#Econ>, retrieved on October 14, 2010.

<sup>467</sup> Sharma, D., "Displacing Farmers: India will have 400 million Agricultural Refugees", [www.stwr.org](http://www.stwr.org), first published on June 22, 2007; retrieved on October 14, 2010.

<sup>468</sup> Ibid.

<sup>469</sup> Ibid.

<sup>470</sup> <http://www.pbs.org/wnet/wideangle/episodes/the-dying-fields/introduction/967/>, retrieved on October 14, 2010.

complex influences attributed to this include the uncompetitive price of cotton in the area, mounting debts and failed crops. In 2007, the Public Broadcasting Service (PBS), an American television station, produced a documentary about the disturbing prevalence of farmer suicides. According to the film, "in 2006, 1,044 suicides were reported in Vidarbha alone—that's one suicide every eight hours."<sup>470</sup>

The urgency of the farmers' plight drew international attention, and some states began the process of policy change. Without any national intervention, however, policies remain varied around the country. While some states ensure compensation for land acquisition, a single lump sum payment often disappears before farming families can adequately plan for their future. In Uttar Pradesh, a northern state bordering Nepal, the state government announced a rehabilitation policy in 2010 with the provision of annuity for displaced farmers. This annuity, at Rs 20,000 per acre per year (\$450) provides a steady income over time as an alternative to a fixed amount of Rs 2.4 lakh per acre (\$5,430).<sup>471</sup>

### 'A completely different world'

When approval for Magarpatta's masterplan finally came through in 2000, the farmers were jubilant, but the recent dot-com bust proved fatal to plans for a local IT centre. Instead, Magarpatta Township Development Construction Company (MTDCC) started building houses. The houses went up in four different sections, with each section developed in various

stages. Although the town itself is a walkable scale, each section has a separate commercial center filled with restaurants, shops, clinics, banks and supermarkets. While the City Council of Magarpatta includes 105 elected members, (with 35% female members), the New Town's political autonomy is still somewhat dubious.<sup>472</sup> The City Council acts as a go-between for citizens and the MTDCC, but all final decisions are made by the development company. In practice, the City Council really functions as a sort of complaint department for unsatisfied citizens.

In 2006, the New Town received SEZ approval, allowing it to profit from all the financial benefits attached to that designation. Two years later, Magarpatta became an ISO 9001:2008 certified township, a title that carries numerous advantages in Maharashtra state. The state government has qualified a chartered township as one that occupies at least 100 acres of continuous land, makes available abundant clean water supply at all times, ensures reliable power, designates at least 60% of the total area for residential purposes and at least 20% for green space, and offers schools, a college, a hospital and a fire station.<sup>473</sup> Limited land availability coupled with high demand for housing, an exploding population and higher disposable incomes has contributed to the widespread adoption of the integrated township model. Integrated townships are seen as the solution to commuter problems and increased standards of living. Each integrated township must provide a school, a healthcare facility, recreation spaces and a community center. Commonly hailed as the answer to India's urban problems, integrated townships are a way of providing relatively inexpensive housing while also decreasing the demand on infrastructure. Roads and highways are always crammed with commuters, and one in four spends more than 90 minutes travelling between home and work.

With Magarpatta's success, Satish Magar himself has become something of a celebrity. In 2007, Magar gave an interview with *MoneyLife*, revealing the backstory to the now famous Magarpatta saga: "For historical reasons, there was a lot of cohesion and harmony among the farmers, arising out of fragmented holding. When a piece of land is divided among the brothers, they divide it in such a way that both get access to the road. So, over time, many plots ended up divided as narrow strips of, say, 20 feet wide and 1000 feet long. Because of the peculiar layout, people did their farming in harmony and cooperation by fixing dates for sowing or harvesting serially in order to economize on labor and equipment. I knew all of them very well since I had done agriculture for five years.

When I started planning the township, I told them, we need to do something with the land; otherwise it will be acquired someday. Many had stories of relatives who sold off their lands, blew the money and had nothing left. That is when I suggested doing something together. We had a meeting of all the landowners where I suggested that we pool our land into a development company and accept proportionate shareholding. The idea was accepted although I did not know how the whole thing would finally evolve.

<sup>471</sup> "New UP rehabilitation policy offers better package to displaced farmers", *The Financial Express*, September 4, 2010.

<sup>472</sup> Ahluwalia, I.J. and Nair, R., "Magarpatta: Building a City with Rural-Urban Partnership", [www.indianexpress.com](http://www.indianexpress.com), first posted on May 26 2010. <http://www.indianexpress.com/news/magarpatta-building-a-city-with-ruralurban/623701/>, retrieved on September 9, 2010.

<sup>473</sup> The state government also requires that the township is easily accessible by roads ranging from 30 to 80 feet in width, and "ensures care of the existing ecological systems, rainwater harvesting systems, and efficient waste management systems", [http://www.amanora.com/about\\_township.htm](http://www.amanora.com/about_township.htm), retrieved on September 13, 2010.

<sup>474</sup> Basu, D. and Dalal, S., "Our township has acted as an agent of social changes





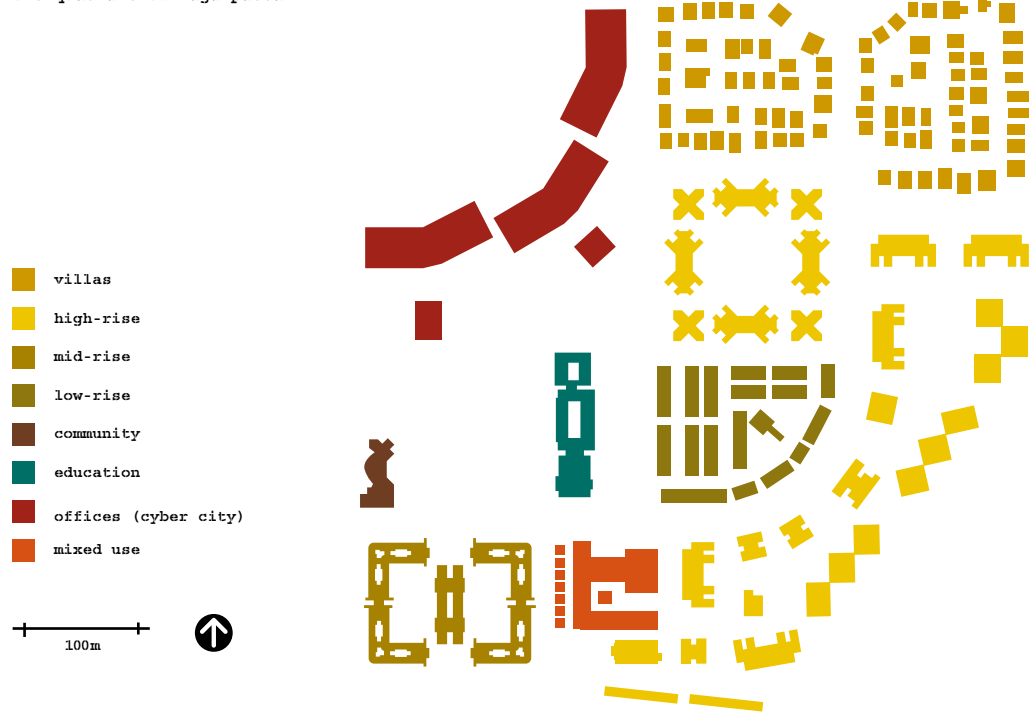


The office buildings encircling the central park form a reflective wall around the public space.





One quadrant of Magarpatta



through a policy of inclusion”, Moneylife, February 15, 2007. <http://www.moneylife.in/article/71/1304.html>, retrieved on September 10, 2010.

**475** The neighborhoods are called: Daffodils, Cosmos, Grevillea, Erica, Acacia Gardens, Roystonea, Heliconia, Iris, Jasminium, Mulberry Gardens, Trillium, Sylvania, Laburnum Park and Zinnia.

**476** <http://www.allcheckdeals.com/developer-builder-magarpatta.php>, retrieved on September 10, 2010.

**477** However, some new inhabitants have complained about the poor quality of construction. The comments section at the end of an entry on Anurag’s blog was filled with complaints from people who had bought property in Magarpatta. One resident wrote: “I just moved into my flat in Jasminium last month and I don’t have a single day without regret. There is not a single corner of the house that I (as a layman) cannot see has bad workmanship. The engineers are dumb, the workers are unskilled, and there is a severe lack

I went to Hafeez Contractor and told him ‘this is what we have, we want to do a township’. He agreed. We made a detailed report of the area we wanted to build on, how much to reserve for education and how much to earmark as open space. Mr. Sharad Pawar was the chief minister and we presented him a nice laminated report, printed on an electronic typewriter with graphs, charts, statistics and pictures.”<sup>474</sup>

### If you build it, they will come

In the center of the New Town, a 25-acre round park named Aditi Garden provides a vital recreation and leisure destination. A 1.2-acre man-made lake adds to the park’s appeal. The edge of the circular park is ringed by twelve IT complexes. The office buildings average nine stories in height, creating a feeling of semi-enclosure in the public space.

Magarpatta has fourteen residential developments, all of which are named after flora and fauna.<sup>475</sup> Two of these neighborhoods are made up of individual bungalows, while the rest are characterized by multi-story apartment buildings. The housing targets the working middle class, with sizes ranging from 50 – 270 m<sup>2</sup>, and prices starting at Rs 1.2 million (\$25, 860).<sup>476</sup> Today, 8000 homes, divided into 28 neighborhoods, provide housing for the city’s 35,000 inhabitants. Each neighborhood is made up of similarly-styled apartment blocks, row houses or private bungalows. Everything is constructed from heavy concrete frames and brick walls, produced in the city by enterprising former farmers.<sup>477</sup>

In order to maintain the close-knit community feeling of the New Town, MTDC hosts various gatherings and social events. A three-day ‘Womens’ Day’ in March 2010 focused on the female citizens of the New Town, using the festival as an opportunity to stress the importance of nutritional food by organizing a cooking competition. Jitu Sharma, the chief chef of Megameals, acted as head judge, tasting the various dishes based on *moong* (yellow lentils). Ms. Nalini Parmar’s moong dish won the day.

In Magarpatta’s large residential areas, the center of each neighborhood is occupied by a semi-private green space and a community clubhouse. The clubhouse is available for parties, meetings, etc. This organization is meant to reflect the traditional *chawls* of Girgaum, Mumbai, a historical neighborhood structure known for stimulating intimacy and familial relationships among tenants.<sup>478</sup> Mr. Magar also cites influences from Silicone Valley cities like San Jose and Santa Clara in the United States, although this influence is more obvious in the town’s IT development.<sup>479</sup>

Cybercity Magarpatta, the IT park at the center of the town, is “among the biggest private STPI development in India at the moment; [it] is home to EXL Service, Avaya, Sybase, Aviva, EDS, Amdocs, Cymbal and Mellon.”<sup>480</sup> In 2004, the project won the Maharashtra government’s award for the best IT infrastructure in the state.<sup>481</sup> The IT companies currently operating in Magarpatta include Amdocs, Sybase India, Accenture Services Pvt. Ltd., Patni Computer Systems, eInfochips Limited, Clarion Technologies, YASH Technologies Pvt. Ltd., Fifth Elementz Technologies Pvt. Ltd., and Invengence Technologies Pvt. Ltd. Local events are regularly organized to build community spirit among employees, and in 2010 the third annual Cybersports competition gave participants from 26 companies in the Cybercity the opportunity to compete in cricket, football, volleyball, basketball, badminton, table tennis, chess and a 5K race.

### And solar panels on every roof

The city’s environmental commitment is evident in several special programs initiated by the residents. One such program is a recycling plan that requires garbage to be separated at its source. The monthly average of 400 tons of household waste breaks down into 280 tons of biodegradable waste that is then used for compost and vermiculture throughout the New Town.<sup>482</sup> A biogas plant also breaks down waste into usable energy. In a more visible environmental pledge, solar panels top the roofs of every single apartment building in Magarpatta. The panels are primarily used to heat the water used by occupants for domestic activities. A rainwater harvesting system collects runoff through underground pipes, to be filtered and then reused in garden irrigation.

In addition to the quantitative measures taken to increase the town’s environmental sustainability, city planners also incorporated the concept of efficient pedestrian access into their design. This idea has been promoted as “walk to work, walk to shop, walk to school”.<sup>483</sup> Walkability is increased by a relatively large proportion of open public space: 30% of

of supervision. If you look at the external plaster, you realise that the buildings look worse than railway colonies. May it be plaster, paint, doorframes, floor or dado tiles, platforms - anything - there is very poor workmanship and pathetic finishing. All this in sharp contrast with the price you pay for the flat. Very low value for money.” Another angry citizen wrote: “Only a blind man should buy a flat in Magarpatta City. Snake-like twisted pillars and beams. Jasminium is the worst example. I feel ashamed to stay in Jasminium. Appears to be made by blind men... Worst plaster, leaking bathroom roofs, false ceiling is loose, unfinished, shabby.” The rest of the comments are equally unhappy. See: <http://anuragjall.blogspot.com/2007/07/magarpatta-city-farmers-cybercity.html>, retrieved on September 24, 2010.

**478** A chawl is typically 4 – 5 stories, with 10 – 20 apartments on each floor. A flat is generally composed of one multipurpose room attached to a kitchen, with shared latrines on a public corridor. Families of ten typically inhabit the same room. The lack of privacy contributes to the swift spread of gossip and news, but also builds a sense of community among tenants.

**479** <http://www.rediff.com/money/2007/jan/11bspec.htm>, retrieved on September 10, 2010.

**480** “Magarpatta: A Dream Town Worth Emulating”, posted on August 30, 2004. <http://www.screenindia.com/news/magarpatta-a-dream-town-worth-emulating/113825/>, retrieved on February 10, 2010.

**481** Ibid.

**482** <http://www.magarpattacity.com/>, retrieved on September 10, 2010.

**483** Ahluwalia, I.J. and Nair, R., “Magarpatta: Building a City with Rural-Urban Partnership”, [www.indianexpress.com](http://www.indianexpress.com), first posted on May 26 2010. <http://www.indianexpress.com/news/magarpatta-building-a-city-with-ruralurban/623701/>, retrieved on September 9, 2010.

**484** The Licence Raj, also referred to as the Permit Raj, was typified by restrictive







regulations and red tape that encouraged corruption and discouraged development by making the process of governmental approval all but impossible. Between 1947 and 1990 the Licence Raj was part of a labyrinthine bureaucracy that stifled both internal stability and international trade.

**485** "India's Surprising Economic Miracle", *The Economist*, September 30, 2010. [http://www.economist.com/node/17147648?story\\_id=17147648&fsrc=rss](http://www.economist.com/node/17147648?story_id=17147648&fsrc=rss), retrieved on October 13, 2010.

**486** This article goes on to give two reasons why India will soon outpace China: demographics and democracy. In terms of population, China's strict one-child policy has produced a workforce that is already aging, and will soon begin to shrink. India has a young and multiplying workforce, and one of the best 'dependency ratios' (retirees and children : workers) in the



The Jasminium Apartments in Magarpatta.

world. India's democratic government has bred a nation of entrepreneurs and encourages the exchange of ideas around the country. Without China's penchant for censorship and mystery, India has risen to the forefront of both innovation and development. See: "India's Surprising Economic Miracle", *The Economist*, September 30, 2010. [http://www.economist.com/node/17147648?story\\_id=17147648&fsrc=rss](http://www.economist.com/node/17147648?story_id=17147648&fsrc=rss), retrieved on October 13, 2010.

the land is classified as 'green'. Magarpatta's large circular park is the main recreational ground, but shaded pathways and neighborhood courtyards add to the verdant atmosphere.

### Sugarcane to sugar daddies

India's economic growth and subsequent urbanization has been pushed forward by free market principles introduced in the early 1990s. With the collapse of the Soviet Union in 1991, (until then, India's major trading partner) India was forced to ask the International Monetary Fund (IMF) for a \$1.8 billion bailout. The IMF complied, with one stipulation: economic reforms. The resulting economic liberalizations resulted in increased foreign direct investment (FDI), the end of multiple public monopolies and the much-derided *Licence Raj*.<sup>484</sup> In 2009, India solidified a striking role reversal by purchasing 200 tons of gold from the IMF for \$6.7 billion.

According to *The Economist*, India's economy is expected to expand by 8.5% in 2010.<sup>485</sup> Although the Chinese economy is still four times as large, some experts predict that India's 'miraculous' growth could overtake the People's Republic as early as 2013.<sup>486</sup> In a country with 1.2 billion inhabitants, such growth is pretty darn exciting: economic development means

money for crumbling infrastructure, housing for an estimated 78 million homeless people nationwide, better food security, rising literacy rates and longer life expectancy.<sup>487</sup>

The story of Magarpatta is representative of the nation's economic growth on a much smaller scale. Before the economic reforms of the early 1990s, the self-organization initiated by the 140 farmer families would not have been possible. Even after the liberalizations, this approach was so unprecedented that the farmers of Magarpatta pioneered every stage of development. "What was unique... [about the Magarpatta model was that] farmers did not have to sell their land upfront as they only had to transfer it to the company. [While] the

land is not developed, farmers were also free to continue farming and earn a living."<sup>488</sup> The town's second generation is also benefitting from the farmers' collective gamble by turning to more entrepreneurial employment. In addition to being landlords, the sons and daughters of the original farmers have become brick manufacturers, professional contractors and landscapers.

The profits are enormous compared to what the farmers were earning from their land just one decade ago. At that time, a two-acre plot of sugarcane would have earned the farmer a minimum of Rs 50,000 (\$1000) and around Rs 100,000 (\$2000) in an exceptionally good year.<sup>489</sup> Today, this land earns a farmer who developed that same two-acre plot dividends

of about Rs 30 – 32 lakh (\$6400 – \$6800) per year.<sup>490</sup> Before development, the average family farmed about four acres, so for those who chose to invest all of their holdings, the land is now generating around \$13,000 annually. For a country where the per capita GDP is only about \$800, this township has turned subsistence farmers into country gentlemen.<sup>491</sup>

One decade after construction began, Magarpatta has proven to be a financial success for the farmers who initially invested in the project, as well as for their children. At its conception in 1994, the farmers' collective was unprecedented; today, this New Town has become a working model for other farmers who risk losing their ancestral land to insatiable developers. In July 2009, Magarpatta Township Development and Constructions Ltd., announced the launch of its second project. Nanded City, a 700-acre township on the Pune-Sinhagad Road, follows the farmer-cum-developer strategy first used in Magarpatta.<sup>492</sup> Since Magarpatta's success, many New Townships in Pune have drawn inspiration from the model, including Amanora, Blue Ridge and Megapolis, proving, perhaps, that imitation is the highest form of flattery.<sup>493</sup>



**487** The non-governmental organization Action Aid estimated the total homeless population for India in 2003 was 78 million. Until now, the homeless have remained an unnumbered mass; the 2011 census will be the first time they are included in the national government's accounts.

**488** "Magarpatta: A Dream Town Worth Emulating", posted on August 30, 2004. <http://www.screenindia.com/news/magarpatta-a-dream-town-worth-emulating/113825/>, retrieved on February 10, 2010.

**489** Ibid.

**490** Ahluwalia, I.J. and Nair, R., "Magarpatta: Building a City with Rural-Urban Partnership", [www.indianexpress.com](http://www.indianexpress.com), first posted on May 26 2010. <http://www.indianexpress.com/news/magarpatta-building-a-city-with-ruralurban/623701/>, retrieved on September 9, 2010.

**491** According to *The Wall Street Journal*, India's median per capita income for 2009 was Rs 38,084 [\$821]. <http://www.livemint.com/2009/02/09150714/India8217s-per-capita-incom.html>, retrieved on September 13, 2010.

**492** The township is the initiative of 235 farmer families who combined their 5.2 km of riverfront property. For more information about Nanded City, see <http://www.nandedcitypune.com>.

**493** Amanora, Blue Ridge and Megapolis are all townships in Pune inspired by the Magarpatta story. For more information on these New Towns, see: <http://www.amanora.com>, <http://www.blueridge.in/>, and <http://www.megapolis.co.in>.

**494** Bacon, F., "The New Atlantis", in: *Ideal Commonwealths*, P.F. Collier & Son,



“From the Italian Futurists’ obsession with the city, to playful schemes like Archigram’s Walking City to Buckminster Fuller’s hermetically sealed geodesic dome, planners have consistently been driven to design the future, whether utopian or apocalyptic.”

## Chapter 5: Hi-Tech Cities: Future Chic

The Hi-Tech Cities of Asia have a strong pedigree. Architects and planners have always been eager to explore the technological possibilities of urban planning. From the Italian Futurists’ obsession with the city, to playful schemes like Archigram’s Walking City to Buckminster Fuller’s hermetically sealed geodesic dome, planners have consistently been driven to design the future, whether utopian or apocalyptic. As early as 1626 Francis Bacon described a society who valued technology and learning above all else in his novel *The New Atlantis*.<sup>494</sup> Though Bacon’s description remains fantastical even today, there are countless technological advances that set the current generation of New Towns in Asia apart from its predecessors.

Perhaps most directly, contemporary Hi-Tech Cities draw from the Japanese technopolis program. In the early 1980s, Japan introduced the concept of the technopolis as part of a regional strategy to promote hi-tech industries and create employment opportunities.<sup>495</sup> New towns were initiated by the Ministry of International Trade and Industry (MITI) and combined hi-tech industrial parks with research institutes and community facilities.<sup>496</sup> The Japanese program was discontinued in 1998, but other countries have since followed the technopolis model.

In China, Deng Xiaoping facilitated the introduction of Special Economic Zones (SEZ) in the 1980s, effectively paving the way for the hundreds of SEZ that would follow around the world. In 2000, India introduced their own version of the SEZ, combining this model with existing IT parks to facilitate production and export of new technologies. According to the Ministry of Commerce and Industry, India now has more than 500 formally approved SEZs and is considered a world leader in IT industry.<sup>497</sup> In many places, the concept of an IT park has grown from a collection of warehouses to a full-scale city with unique economic policies.

Like the Japanese model, the two case studies presented in the following pages are fully-functioning New Towns with integrated IT research and development industries. They also incorporate lessons from the SEZ

New York, 1901. This book is in the public domain, released August 1993.

**495** Suzuki, S., “Technopolis: Science Parks in Japan”, in: *International Journal of Technology Management*, 2004. Vol. 28, No.3/4/5/6, pp. 582 - 601.

**496** See: Yazawa, S., “The Technopolis Program in Japan”, in: *Hitotsubashi Journal of Social Studies* 22, August, 1990, pp. 7-18.

**497** Although Magarpatta is discussed in this book as an Economic City, it is also a product of the IT boom in India during the early 1990s. See: <http://www.sezindia.nic.in/about-asi.asp>, retrieved on December 6, 2010.

**498** South Korea is a lead player in the future telecommunications market



and one of the most digitally-connected countries on earth. In 2009, the Economist Intelligence Unit ranked South Korea 11th in a ranking of the world's most innovative countries. See: [http://graphics.eiu.com/PDF/Cisco\\_Innovation\\_Complete.pdf](http://graphics.eiu.com/PDF/Cisco_Innovation_Complete.pdf). See also: "Korea develops most advanced wireless tech", The Korean Herald, January 26, 2011.

**499** The 'Top Ten' cities are: Seoul, Singapore, Tokyo, Hong Kong, Stockholm, San Francisco, Tallinn, New York, Beijing and New Songdo City. The cities were ranked according to broadband speed, cost and availability, wireless Internet access, technology adoption, government support for technology, education and technology culture and future potential. See: Ramachandran, A. "Tech Capitals of the World", The Age, June 18, 2007.

**500** Badlisham Ghazali, CEO of the body that runs the Multimedia Super Corridor quoted in Kent, J. "Reviving Malaysia's Hi-tech Dreams", BBC News, June 8, 2006.

**501** An article from Australia's newspaper The Age reveals: "a resident's smartcard

strategy, using specialized tax incentives and streamlined licensing to attract foreign investors. The first of these, New Songdo City, is a New Town just outside of Incheon, South Korea—one of the most technologically advanced countries in the world.<sup>498</sup> In New Songdo, all information systems are linked, and the newest technologies are integrated into every aspect of daily life. In 2007, even before construction was completed, the Australian newspaper *The Age* listed New Songdo as one of the 'Top Ten Digital Cities' in the world.<sup>499</sup> Many of these technologies are related to personal communication and allow inhabitants to live the somewhat dubious dream of total connectivity. In most cities claiming status as 'hi-tech,' ubiquitous Internet capabilities are standard. However, in New Songdo, the network infrastructure allows residents to remotely control their environments, maintain constant digital contact, and link all personal information systems (medical, financial, educational, etc.).

Cyberjaya is a slightly older Hi-Tech City located 50 km south of Kuala Lumpur, Malaysia. In some ways, Cyberjaya is Songdo's avatar. Cyberjaya, billed as 'Malaysia's Intelligent City' was launched in 1997 by then-Prime Minister Mahathir bin Mohamed. The city hosts some of the largest universities in the country, research and development institutes, government bodies and various multimedia industries. As part of the country's Multimedia Super Corridor, Cyberjaya plays a major role in Malaysia's ambition to become the 'Silicon Valley of the East.'<sup>500</sup> Since its triumphant birth, however, Cyberjaya has faced various roadblocks. Most critically, the Asian financial crisis of 1997-8 put a hold on some major plans and forced a government buyout, while the dot-com bust in 2000 once again scared off potential investors. Since then, Cyberjaya has struggled to maintain relevance.

Both New Towns are part of national strategies to encourage knowledge development and investment in new technologies. However, while Songdo is a wholly private initiative, the Malaysian Ministry of Finance holds a 70% stake in Cyberjaya. The discrepancy in government involvement has an obvious impact of the cities' development. While Songdo is totally market-driven, Cyberjaya's growth is guided by government demands.

Perhaps most interesting is the somewhat surprising fact that technological changes have not altered the pattern of urban development in either New Town. Even in the wholly networked 'Smart Cities' like New Songdo, we see the ever-present street grid and conventional, anonymous tower blocks. The technological advances of the 21st century have, apparently, meant so little to urban planning that both New Songdo City and Cyberjaya might as well have been designed in the 19th century. In fact, Songdo's urban fabric is indeed based on famous urban elements from previous centuries. A re-imagined Central Park, Savannah's neighborhood squares, and a canal system inspired by Venice all appear in the city's plan.

As these cities age and technology advances, it will be interesting to see how the urban environments adapt. Of all the New Towns examined in this book, Hi-Tech New Towns, with their built-in telecommunications infrastructure and state-of-the-art machinery, are most at risk of falling behind. While technology continues to evolve, these New Towns are left with aging systems built into every wall, floor and road. For Cyberjaya and New Songdo, the risk lies in their very avant-gardism. What was, for a moment, cutting edge and futuristic quickly becomes dated and obsolete. It will be up to these New Towns to preserve their competitive advantage with an eye, always, to the future.



**Date:**  
1996 - 2015

**Status:**  
Under construction

**Location:**  
37°23'58.71"N, 126°39'15.74"E

**Designer:**  
OMA (1996)  
KPF (2001 - 2015)

**Developer/Client:**  
Gale International and Korea's  
POSCO E&C with the City of  
Incheon

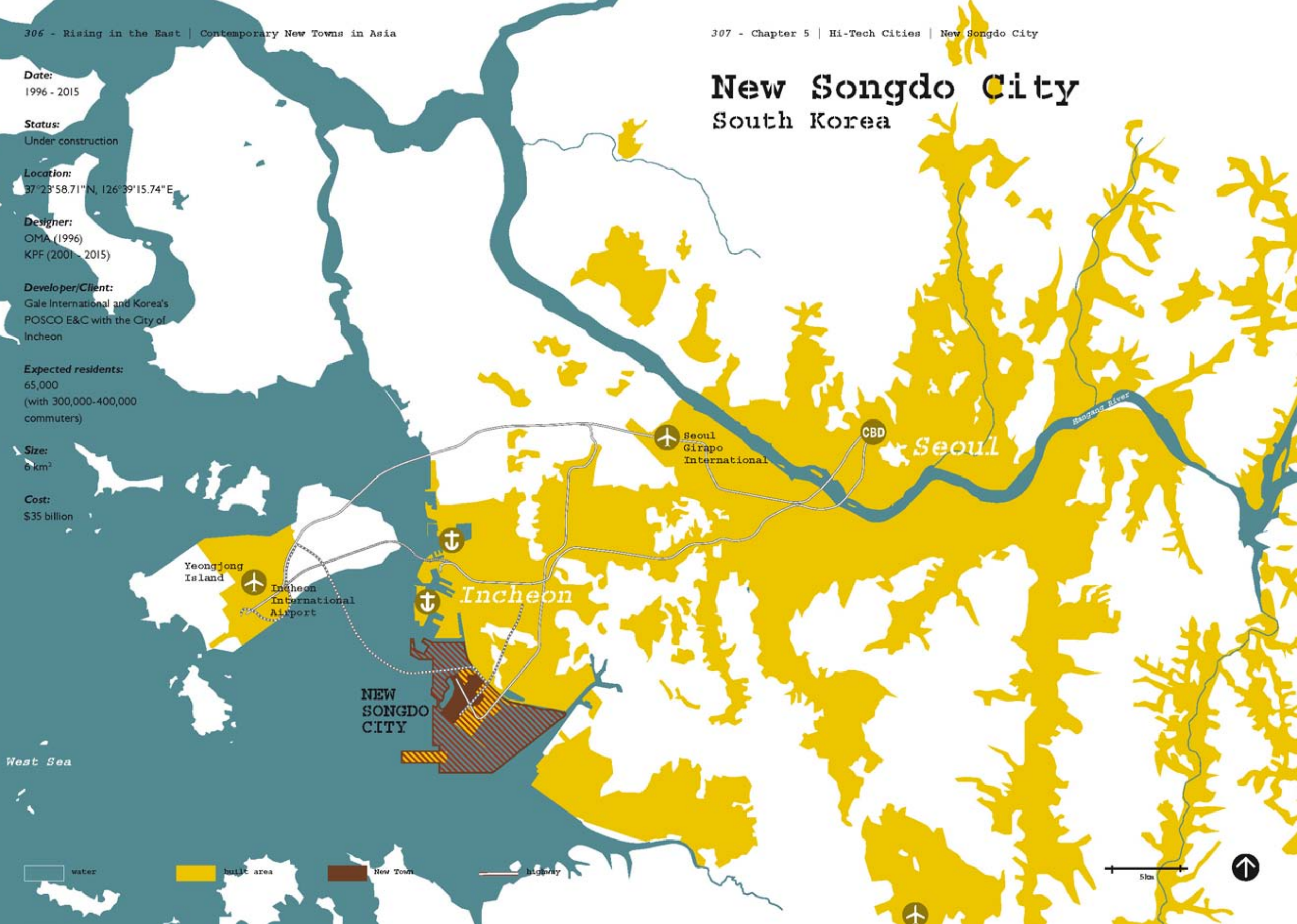
**Expected residents:**  
65,000  
(with 300,000-400,000  
commuters)

**Size:**  
6 km<sup>2</sup>

**Cost:**  
\$35 billion

# New Songdo City

## South Korea



West Sea

water
  built area
  New Town
  highway

5km







### Cheaper. Faster. Better?

Waking up in New Songdo City is all about convenience. From the minute your feet swing out of bed and onto the floor, your home is awake with you, anticipating your needs and fulfilling any pre-programmed desires. The floor itself has pressure sensors, registering those barely-awake toes and responding by switching on the coffee machine—should you slip and fall, the sensors will record the change and automatically send paramedics to your rescue. A fresh macchiato is waiting in the kitchen by the time you finish your shower. Before leaving for work, a quick virtual check-up with your doctor via video communication can ensure you are fit to face the day.

Should you leave the house and forget to turn something off (anything, really) a quick scroll through your cell phone gives access to your home heating and cooling controls, security system and lighting. After that, you might want to use your smartcard to borrow a free public bicycle. Feeling lazy? That same smartcard will give you access to any one of the 10,000 electric 'smart' cars circulating through the city.<sup>501</sup>

After work, (which—for better or worse—will register your entry and exit to the building) you could use that smartcard to see a movie or enter a museum. When you toss your soda can in the trash after the film, radio frequency identification (RFID) technology will automatically credit your recycling account. All the technological infrastructure is done by Cisco Systems, as a sort of city-scale test-run for their 'Smart+Connected Communities' program. The program integrates real estate, utilities, transportation, learning, health and government; creating a fully networked operation. In Songdo, everything is recorded, tracked and observed, making each event hyper-efficient, and just a little bit creepy.

### 'You shouldn't spend time on lighting'

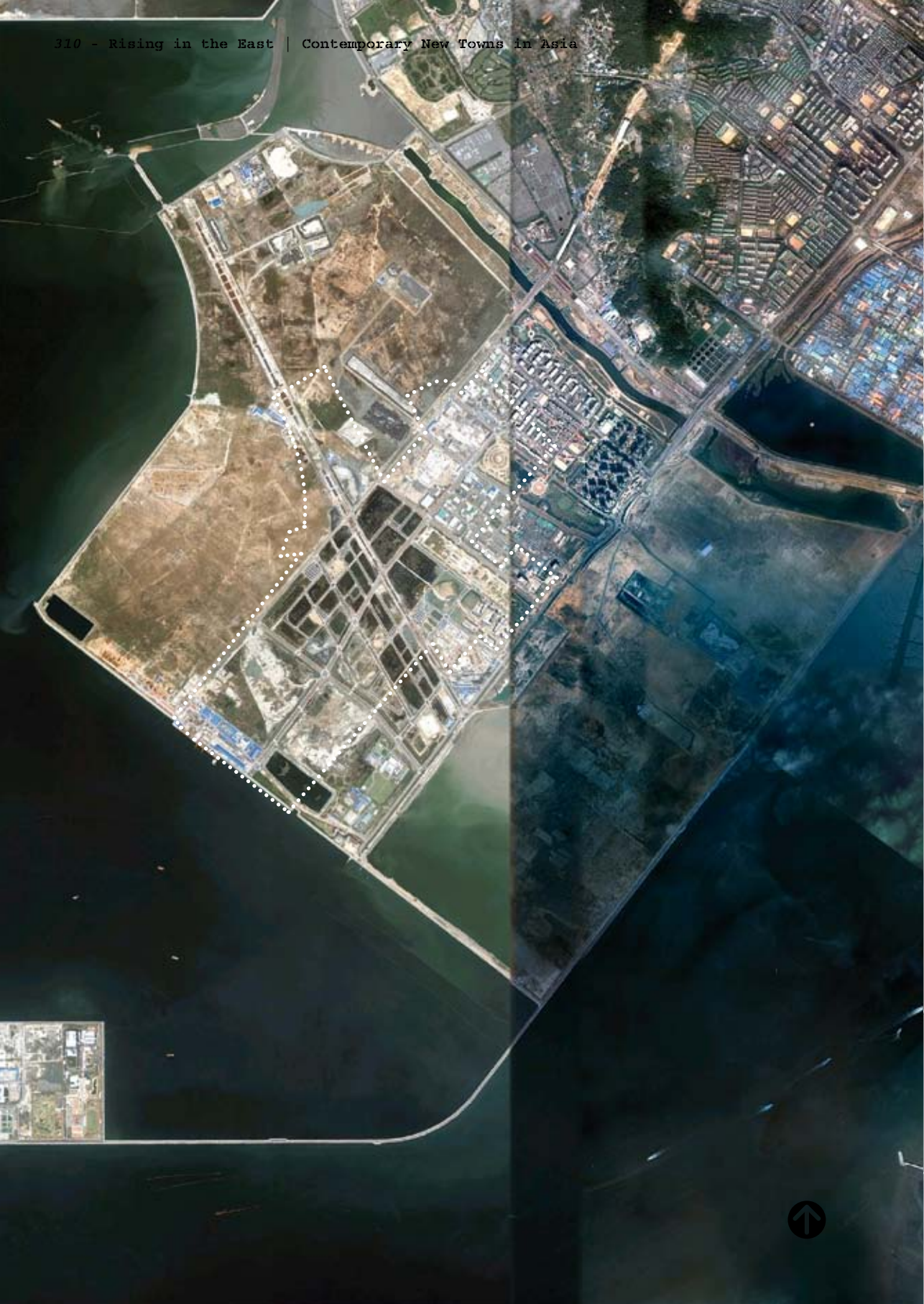
Built on the Song Do tidal flats, 64 km southwest of Seoul, New Songdo City is ambitious, even by New Town standards. The city is constructed on 6 km<sup>2</sup> of reclaimed land jutting into the Yellow Sea. The land was created in a style similar to the manufactured Dutch polder landscapes: flat, gridded land slowly materialized from beneath the sea. The landfill project began in 1996, initiated

house key could be used to get on the subway, pay a parking metre, see a movie or borrow a free public bicycle... A wave

The U-Life Management Center ensures that everything (and everyone) stays connected.







- office space
- commercial
- residential
- green space / public use
- golf course & park

500m





OMA's original masterplan for New Songdo City, 1996.

jointly by Daewoo and the Korean government. In the optimistic years preceding the Asian financial crisis, Rem Koolhaas' Office for Metropolitan Architecture (OMA) was brought in to draw up a masterplan for the Songdo area, as well as the New Seoul International Airport (later called Incheon International Airport) on Yeongjong Island. The proposal covered 42 km<sup>2</sup> and provided housing for 200,000 residents.

That plan, though reinterpreted by subsequent designers, is still clearly recognizable in aerial images. Filling the tidal flats gave OMA as close to a *tabula rasa* starting point as possible. Design decisions were not threatened by geographic limitations, and the office came up with an imaginative plan that used a network of overlaid programmatic bands to form an integrated whole.<sup>502</sup> A wide canal running parallel to the 3rd Gyeongin Expressway further removed the New Town from the southern edge of Incheon, creating an island rather than a peninsula. Ironically, one could argue that it is this deliberate separation—a remnant from the OMA plan—that has contributed to the overwhelmingly generic atmosphere of the city. Where one might expect contextual nods or local influences, one finds instead reproductions of famous Western urban forms surrounded by surprisingly standard urban fabric.

OMA's involvement in the project ended in 1998, after the Korean won failed and the International Monetary Fund (IMF) organized a bailout for the foundering country. The Songdo project went into stalemate, and Daewoo declared bankruptcy in 1999. That same year, officials from the City of Incheon Urban Planning team made contact with Korean-American former US Representative Jay Kim, who then contacted Gale International, an American real estate and development company led by the charismatic Stanley Gale. The project brief presented to Gale suggested that he could borrow \$35 billion "from Korea's banks and its biggest steel company [POSCO E&C], and use the money to build from scratch a city the size of downtown Boston, only taller and denser, on a muddy man-made island in the Yellow Sea."<sup>503</sup> Gale snapped up the unwanted land for a pittance, and in accordance with Korean



Programmatic bands were interlaced to create OMA's plan.

investment policy, the project eventually materialized as a 70% - 30% joint venture between Gale and POSCO E&C, respectively. Which means that, unlike many of its contemporaries, New Songdo City is a fully privately financed development. Songdo's \$40 billion price tag also makes it the most expensive private real estate development in the world.<sup>504</sup> Such a huge project would always have been risky, but the global economic crisis from 2007-2009 made things even trickier, and South Korea's tense relationship with its northern neighbor has only complicated things. According to David McNeil of *The Independent*, "Putting [Songdo] mostly in the hands of a single, largely untested, US firm and financing it with recycled real-estate profits sounds like an act of lunacy. Yet this is what is happening in South Korea, and strangely, it appears to be working."<sup>505</sup>

Indeed, the Songdo project has emerged largely unscathed by the global economic crisis, due in part to Stanley Gale's impressive ability to secure loans in excess of \$35 billion and a personal investment of \$100 million.<sup>506</sup> As he freely admits, "I'm a risk taker."<sup>507</sup> The claim is almost an understatement. Gale's ultimate goal is to mass-produce copies of Songdo across Asia, constructed at twice the speed and half the price. So far, two Chinese municipalities have signed contracts, Chongqing and Dalian; and one offspring is already in the works. As Greg Lindsey writes in an article for *Fast Company* magazine, "New Songdo's first clone will break ground this year on the outskirts of Changsha, a provincial capital larger than Singapore. The Meixi Lake District will be larger than New Songdo and just as dense, smart, and green—and eerily familiar. This and every subsequent city will be standardized around Gale's partners' products: the same light fixtures, traffic signals, elevators, fuel cells, central air-conditioners and TelePresence screens."<sup>508</sup> The TelePresence screens are part of Cisco's contribution, and other technology contracts have gone to 3M, LG, GE and Otis, among others. In the same article, Executive Vice President of Cisco Services Wim Elfrink confirms Songdo's global ambitions: "We're trying to replicate cities, but we have no standards. Every city is a new project, a new process, a new interface; you shouldn't spend time on an elevator [thus the Otis contract]. You shouldn't spend time on lighting [ditto the LG contract]."<sup>509</sup> The statement sounds somewhat contradictory, (replicating cities without standards?) and Elfrink's claim should come as a shock to contextualists: the audacious proposal offers a pre-packaged 'city in a box' for \$40 billion a piece.<sup>510</sup> Clearly, there are standards, or at least, standard contracts. In a more recent article from *Wallpaper* magazine, Gale himself goes a step further, saying "We want to crack the code of urbanism, then replicate it. We want to build at least twenty Songdos ourselves: the G20—Gale 20."<sup>511</sup>

of a smartcard is all that will be required for a quick jaunt across town in an electric 'smart' car - there will be 10,000 such cars circulating in the city." See: "Tech Capitals of the World", *The Age*, June 18, 2007.

<sup>502</sup> Koolhaas, R. and McGettrick, B. (eds), *Content*, Taschen, Köln, 2004, pp. 430-431

<sup>503</sup> Lindsay, G., "The New Urbanism: New Songdo and Creating Cities from Scratch", *Fast Company*, February 1, 2010.

<sup>504</sup> Although Songdo is privately-funded, it was developed in partnership with the City of Incheon. See: McNeil, D., "Songdo City Defies Crisis Odds", *Asia Times Online*, November 12, 2009.

<sup>505</sup> McNeil, D., "New Songdo City: Atlantis of the Far East", *The Independent*,



Educators share insights using Cisco's TelePresence technology.

June 22, 2009.

<sup>506</sup> Gale International's finance partners are JP Morgan, Morgan Stanley and Shinhan Bank.

<sup>507</sup> Arlidge, J., "Metropolis Now", *Wallpaper*, October, 2010, p. 263.

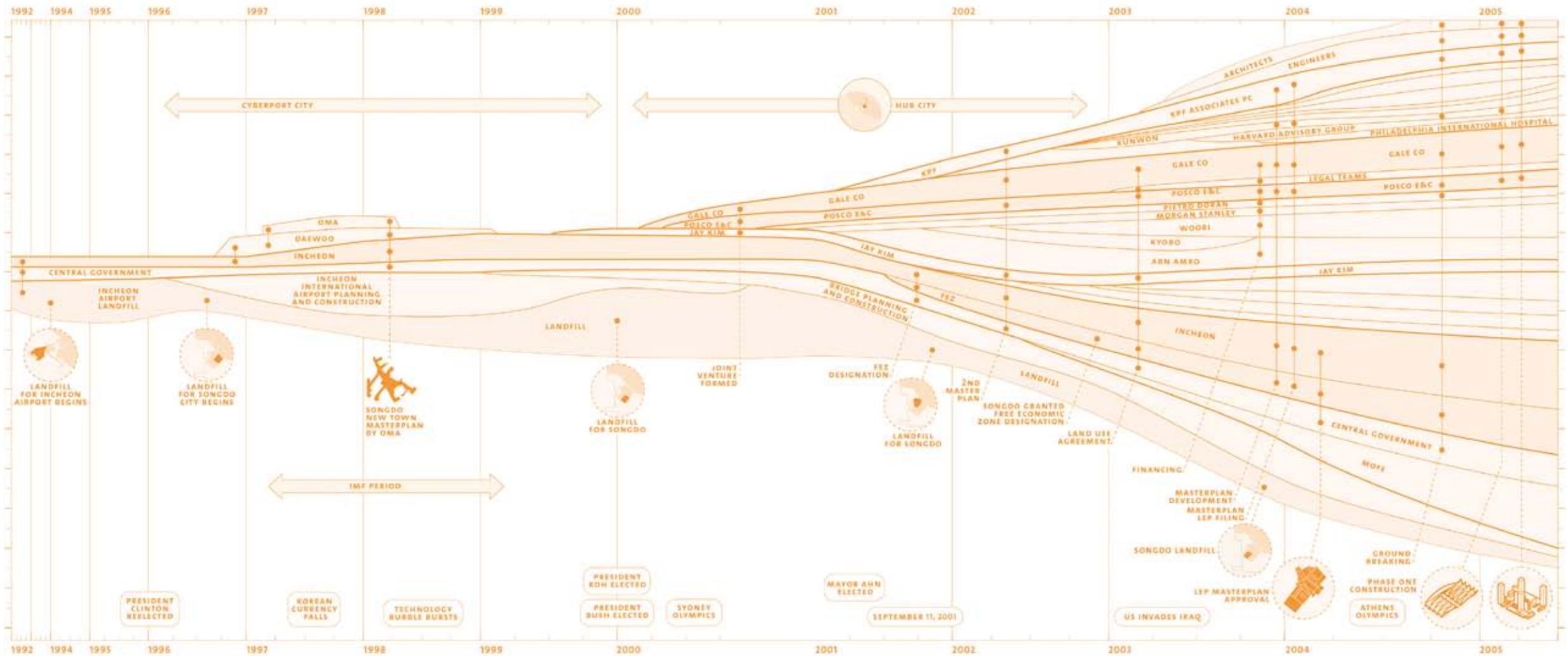
<sup>508</sup> Lindsey, G., "The New Urbanism: New Songdo and Creating Cities from Scratch", *Fast Company*, February 2010, p. 95.

<sup>509</sup> *Ibid.*

<sup>510</sup> Arlidge, J., "Metropolis Now", *Wallpaper*, October, 2010, p. 263.

<sup>511</sup> *Ibid.*





A timeline shows the many parties and factors that influenced the development of New Songdo City.

**512** '6-2-5 War' is a term that refers to the starting date of the conflict (June 25, 1950), for residents of the Korean peninsula, the war has never been fully resolved, and North and South Korea are considered to have reached a cease-fire armistice. Smaller violent actions continue to this day, most recently exemplified in November 2010 when North Korea fired artillery shells on Yeonpyeong island, roughly 80 km west of Incheon.

**513** Ahn, K. and Lee, C., "Five New Towns in the Seoul metropolitan area and

### The free zone

Since gaining independence from Japan in 1948, South Korea has been a constitutional democracy, and the national government has been intimately involved in the urban planning process. The young nation showed interest in New Town construction as early as the 1960s, while still recovering from the Korean War (known in South Korea as the '6-2-5 War').<sup>512</sup> The first wave of New Towns was part of a policy to relieve post-war overcrowding in Seoul. In the 1970s, New Towns were developed as dormitory towns for large-scale industrial complexes, as part of a larger national development strategy. By the late 1980s, real estate speculation drove the construction of New Towns within the Seoul metropolitan area. Soaring housing prices coupled with extreme housing supply shortages propelled the speculation.

Despite a few spurts of military dictatorship and two coups d'état during the 20th century, South Korea developed into one of the most stable countries in the world, and is currently the fifteenth largest economy. Since the first direct elections in 1987, South Korea has been a semi-presidential liberal democracy. These elections kick-started the 'Sixth Republic': South Korea's current government. During the early years of the Sixth Republic, five major New Towns were established to help house the growing population. In an all-too-familiar story, these adolescent New Towns (Bundang, Ilsan, Pyeongchon, Sanbon, and Joongdong), currently exhibit disappointing social conditions: their "commercial districts have remained underdeveloped and as a result, the New Towns have been criticized for becoming bedroom communities."<sup>513</sup>

their attractions in non-working trips: Implications on self-containment of New Towns", Habitat International, Volume 29, Issue 4, December 2005, p. 648. **514** <http://www.kpf.com/main.asp>, retrieved on December 12, 2009.



**515** Incheon International was one of three airports to receive the full five-star rating by Skytrax in 2011. See: <http://www.airlinequality.com/AirportRanking/sel.htm>, retrieved on May 23, 2011.

**516** The population of the Seoul Metropolitan area was more than 24.5

As part of the New Town waves prior to the City Development Act of 2000, these communities were almost completely restricted to public sector development, namely, national and local governments and public corporations. The Act was significant because it provided an opening for private sector involvement. In the decade since the City Development Act passed, private sector corporations have played an increasingly large role in the development of Korean New Towns. Songdo is no exception.

Shortly after the IMF bailed out a struggling South Korea in 1997, the City of Incheon and the Korean Government initiated a long-term economic strategy based on developing the nation into a service and technology-based economic powerhouse. According to the planners, this strategy “would require three things—a new international airport, a central place to house this new economy and substantial economic incentives to induce foreign investment to Korea.”<sup>514</sup> The airport and land development project first went to OMA, as we have seen, and later to Fentress Bradburn Architects, who subsequently worked with Korean Architects Collaborative International. The \$5 billion airport opened in 2001 and is currently considered one of the best airports in the world.<sup>515</sup>



A big part of Songdo’s marketing story is its proximity to 1/3 of the world’s population.

To accommodate the new economic strategy, the Incheon Free Economic Zone (IFEZ) took shape as an area spanning 210 km<sup>2</sup> along the Incheon coast. The IFEZ includes Yeongjong Island (site of the Incheon International Airport and connected to Songdo via the record-breaking Incheon Bridge); Cheongna, north of Songdo and the Incheon Port, a symmetrically designed development focused on finance, and Songdo itself make up the IFEZ area.

The IFEZ was officially designated by the Korean government in August 2003 (Korea’s first FEZ) as a way of encouraging international investment and creating an urban live/work setting specifically targeted to foreigners (thus New Songdo City’s international schools, and foreign medical facilities). IFEZ currently offers an extensive menu of tax benefits for foreign-invested companies, support for technology introduction (in the form of tax reduction on royalties and tariff reductions), tax incentives for dividends of foreign investors, and income tax exemptions for non-Koreans.

One of New Songdo’s major selling points is, of course, its strategic location in the Northeast Asia trading hub. The calculated link with Incheon International Airport (fifteen minutes by car) enables industrious businessmen and women to reach one third of the world’s population in 3.5 hours—a fact that is often repeated in marketing presentations. Korea’s self-described position as a “nut in the nutcracker of China and Japan” makes this an extremely well-placed economy. Continued market liberalizations and export growth has fueled development. The country’s membership in APEC (Asia-Pacific Economic Cooperation) since 1989 has helped solidify its standing as an Asian Tiger.

### City of the future

Like all major cities, Incheon (pop. 2.76 million) has faced increasing urban sprawl over the past three decades.<sup>516</sup> New Songdo’s urban design and adjacent location is meant to combat the city’s slow spread and simultaneously combine the best of all worlds within a 6 km<sup>2</sup> area. When Gale secured control of the project, they brought in the American design firm Kohn Pedersen Fox Associates (KPF) to reinterpret OMA’s plan. KPF reused much of the existing plan, maintaining the basic triangular shape and extensive regular grid. The business district (angled at 30 degrees to the grid), various green spaces and an interior lake, are also still present in the original plans.

Ironically, while OMA’s design was intentionally laid out to avoid “the single function conditions found in bed-towns or business parks, and the traffic burden this separation causes”, KPF’s plan is much more mono-functional.<sup>517</sup> Organization of the urban space follows strict zoning rules and broad avenues segregate city blocks. The KPF version is also much smaller: only four of the eleven original city districts will be completed. The new interpretation will therefore have a reduced population, with about 22,000 housing units for a projected total of 65,000. By early 2011, more than 12,000 people were already living in the futuristic New Town, including Stanley Gale himself.<sup>518</sup>

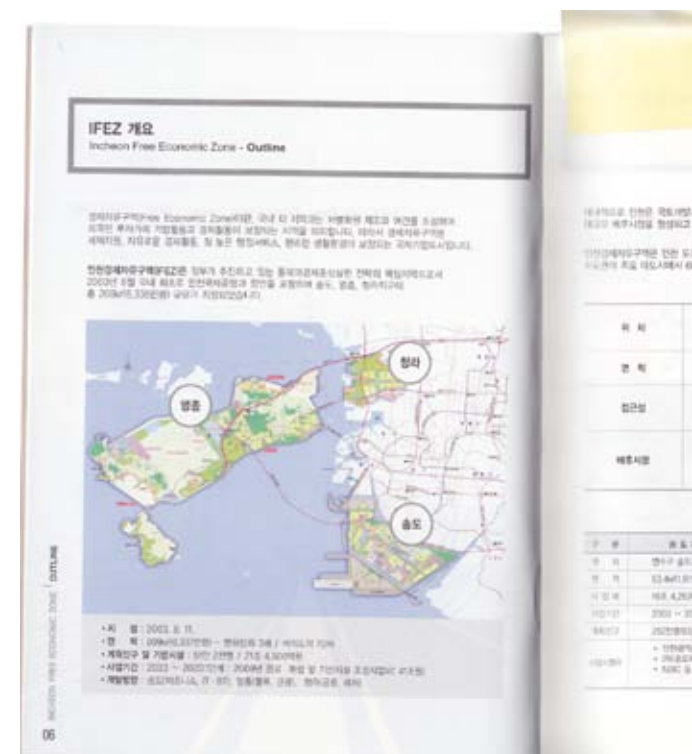
With four city districts already in development by Gale International, John Portman & Associates entered the picture in 2009. Portman Holdings, the

million at the end of 2010, according to state records. See: [english.seoul.go.kr](http://english.seoul.go.kr), retrieved on May 19, 2011.

**517** [http://www.oma.eu/index.php?option=com\\_projects&view=project&id=917&Itemid=10](http://www.oma.eu/index.php?option=com_projects&view=project&id=917&Itemid=10), retrieved on August 27, 2010.

**518** Gale apparently occupies a \$4 million flat in First World Tower 1. See: Arlidge, J., “Metropolis Now”, Wallpaper, October, 2010, p. 266.

**519** McNeil, D., “New Songdo City: Atlantis of the Far East”, The Independent,



The Incheon Free Economic Zone (IFEZ) is spread across three separate areas. New Songdo City is located in the southern peninsula.



June 22, 2009.

520 Ibid.

521 <http://urbanneighbourhood.com/?p=5015>, retrieved on June 24, 2010.

developing arm of the American architecture firm, bought 607 hectares of land northwest of the city. The future development, (Districts 6 and 8) is more organically shaped, and revolves around the planned 151-story Incheon Tower. This tower, if completed, would become the tallest skyscraper in South Korea, and the second-tallest in the world. Portman is hoping that the media hype will encourage buyers to invest in residential property around the tower. In an effort to attract more buyers, Portman & Associates made an agreement with the Dutch architecture firm MVRDV in 2009 to design one of the adjacent residential blocks. Another block went to the New-York based REX office. Both firms have high name value in the Korean context, but the Portman project is currently on hold. Following the global economic crisis, extension plans for New Songdo reached an impasse. The reclaimed land just west of Gale's development now faces an eerie repeat of the events only one decade earlier. A new Incheon mayor, elected in May 2009, has added to the uncertainty. For now, the future growth of New Songdo City remains unclear.

### Welcome to Songdo

The districts developed by Gale, however, are shuttling along roughly on schedule. Already, skyscrapers reach into the foggy air, and manicured lawns stretch across the parks. Los Angeles-style roads stand empty, ready for an onslaught of traffic that is probably still years away. Massive open green spaces, walking paths, a 25 km bicycle lane network, metro lines and bus service, (as well as integrated charging points for hybrid and electric vehicles) create a diverse mix of transport options for the current occupants and support the planners' goals for sustainable solutions. They also contribute to the city's '40% green space' claims.<sup>519</sup>

But alongside the sustainability and high-tech dialogues, the city's true focus is clearly business, as evidenced by the masterplan. Two large residential areas are punctured by a linear commercial and International Business District (IBD), offset from the pervading grid. The business district is much denser than the residential areas, and serves four times as many users. In fact, although Songdo's final population will be around 65,000, the New Town will host an estimated 400,000 commuters each day. To accommodate this influx, there will be five times as much office space as retail space, and some buildings will even feature 'officetel' units; a kind of office-slash-hotel space that combines the telecommunications apparatus of an office with the sleeping and living amenities of a hotel room.<sup>520</sup> The new typology reflects the world-class ambitions of the IBD—it assumes inhabitants whose work and life is so interconnected that every spare moment must be spent with access to business amenities. A section through this district shows buildings rising in a regular stepped pattern, reaching a maximum height at the main axis, as if celebrating the New Town's financial stimulus.

North of the IBD, a 40 ha Central Park occupies the very heart of the New Town. The park, (based on New York's) combines 'natural' landscapes with bike and walking paths, man-made seawater canals and pedestrian footbridges. The canals extend into the city, with water taxis

providing an alternative form of transport. Strategically placed rocks jut up from the pathways, and though almost kitschy in its careful realization, the reference is obvious.

In the residential areas, the basic grid of roughly 100 x 200 m breaks the city into blocks. Condominium towers rise out of the landscaped green space, and the core of each block features an individual, semi-private park. The residential towers range from four up to 65 stories, creating

a mix of heights. The

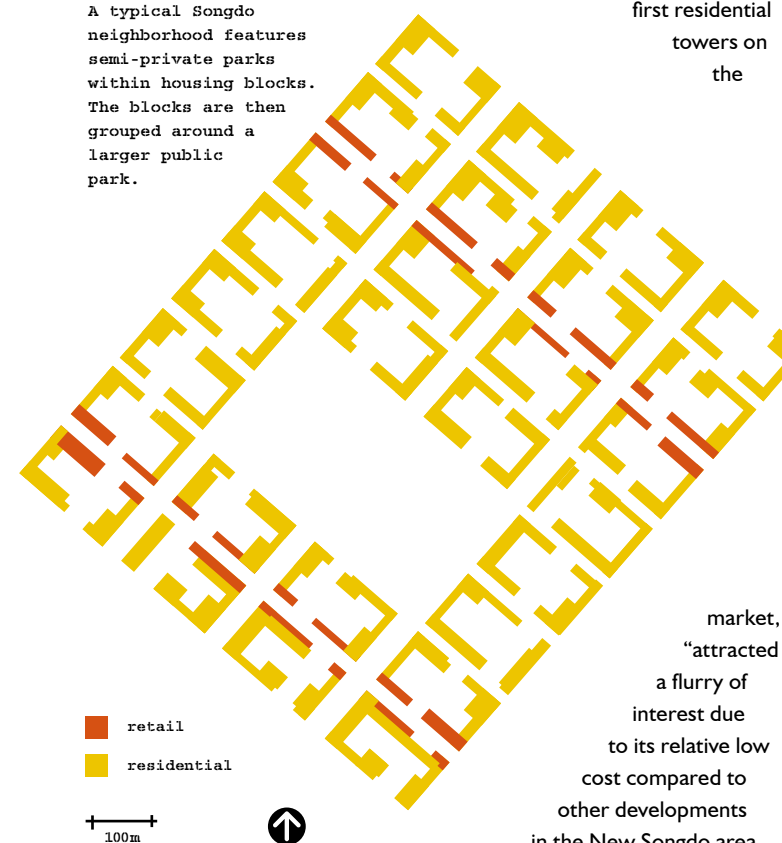
Prau, one of the

first residential

towers on

the

A typical Songdo neighborhood features semi-private parks within housing blocks. The blocks are then grouped around a larger public park.



market, "attracted a flurry of interest due to its relative low cost compared to other developments in the New Songdo area.

Each *pyeong* [a traditional Korean unit of measure equal to 3.3 m<sup>2</sup>] is priced at 6.5 million won which is about \$6,954.<sup>521</sup> The smallest units in the development are 56 m<sup>2</sup>, and are expected to sell for about 65 million won (\$56,700).<sup>522</sup> The units are selling especially quickly because they are eligible for immediate resale, unlike some of the apartments in the surrounding towers where resale is restricted to prevent speculation.

### Around the world in 20 minutes

The international references in the design are conceived as one of the project's major selling points. According to the developer's website, "Songdo IBD boasts the wide boulevards of Paris, a 100-acre Central Park reminiscent of New York City, a system of pocket parks similar to those

522 Ibid.

523 <http://www.songdo.com/home/why-songdo/a-brand-new-city.aspx>, retrieved on





Real Estate Consulting

# 공인중개사

송도/영종/청라특구 부동산 매매/전세/임대전문

TEL. (032) 835-7100, 7988~9 FAX. (032) 835-7987  
인천시 연수구 송도동 4-1 포스코더샵빌드 F동 101호(컨벤시아맞은편)

## 포스코 · 오피스텔 · APT · 전월세 · 상가 · 매매 · 임대

An advertisement for housing in New Songdo. Image by the author



### 송도/논현신도시 · 영종 · 청라 전문 부동산

대표전화 [032]

# 835-7100

인천광역시 송도동 4-1 포스코더샵 상가 F동 101호

321 - Chapter 5 Hi-Tech Cities

Real Estate Consulting  
뉴욕 공인중개사

대표전화 [032] 835-7100

### 1 동 (Tower)

### 2 동 (Mid-Rise)

### 3 동 (Tower)

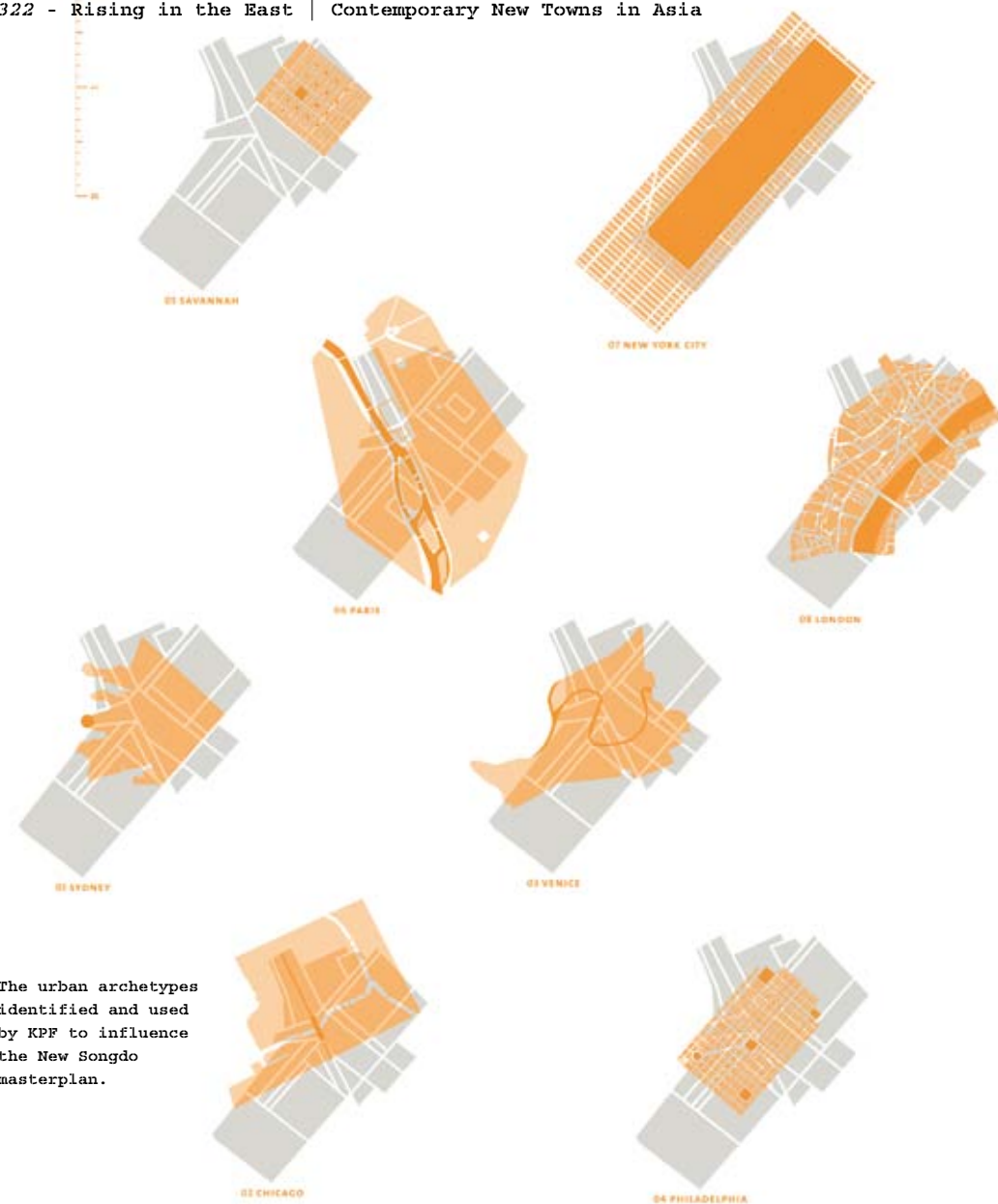
### 4 동 (Tower)

Some housing options in New Songdo City. Image by the author

### 5 동 (Mid-Rise)

### 6 동 (Tower)





The urban archetypes identified and used by KPF to influence the New Songdo masterplan.

December 11, 2009.

**524** <http://www.songdo.com/songdo-international-business-district/why-songdo-a-brand-new-city.aspx>, retrieved on June 24, 2010.

**525** <http://www.chadwickinternational.org/index.cfm>, retrieved on June 24, 2010.

in Savannah, a modern canal system inspired by Venice and convention center architecture redolent of the famed Sydney Opera House.”<sup>523</sup>

This conglomeration of famous urban fragments is meant to increase the quality of life in the New Town by concentrating the recognizable elements in a new urban environment. The references that provide inspiration for the architecture are presumably part of a larger strategy to make foreign investors and expatriate residents feel right at home, and if that isn't enough, the city's *lingua franca* is English. As the marketing literature proclaims, Songdo aims to “create a dynamic, vibrant world community for business professionals and their families.”<sup>524</sup> The target inhabitants are educated, wealthy Koreans as well as foreigners. For \$25,000 annual tuition the Chadwick International School caters to this demographic,



educating 70% foreigners and 30% Koreans.<sup>525</sup> Also designed by KPF, the International School includes an impressive collection of classrooms, offices, performance spaces, art studios, and athletic facilities for 2000 students ranging in age from four to eighteen. According to the architects, “The site plan is configured as individual building elements linked together by a series of courtyards. Pedestrian movement through the campus is organized on east-west axes that offer extended views and unite larger zones of experience with shorter north-south axes intersecting these promenades... Taking inspiration from traditional Korean palace and garden design, stepped sections and sunken gardens separate age groups and create programmatic connections.”<sup>526</sup> The school even boasts a television station in the basement, where students can broadcast to other schools around the world.

But the international school pales in comparison to the New Town's educational clincher: Songdo Global University will be an international collaboration between European, American and Korean universities. So far, North Carolina State University and the State University of New York at Stony Brook have partnered with Korean academic institutions. Another three are said to be considering contracts. But as journalist David McNeill points out, “not everybody is so enthusiastic. Academics at other universities, including Yonsei, say they have been shoehorned into moving to Songdo thanks to sweetheart deals with the Incheon government. “Nobody on the Yonsei campus wants to move to Incheon,” claims

**526** <http://www.kpf.com/project.asp?R=2&ID=84>, retrieved on June 24, 2010.

**527** McNeil, D., “Songdo City Defies Crisis Odds”, Asia Times Online,





Looking southwest from the main bridge connecting Songdo to Incheon, waterfront sports grounds and housing towers create a strong first impression, 2011.

November 12, 2009.

**528** "Tech Capitals of the World", *The Age*, June 18, 2007.

**529** Laporte, D., "House calls", *The Star*, August 2, 2008.

**530** Arlidge, J., "Metropolis Now", *Wallpaper*, October, 2010, p. 266.

**531** <http://www.cityofsound.com/blog/2010/01/notes-on-new-songdo-city>.

Horace Underwood, a professor emeritus at Yonsei. "Every department and organization is fighting against it."<sup>527</sup>

At an urban scale, New Songdo embraces the competitive technology culture of South Korea, and the city will be one of the first in which residential, medical and business information systems are linked.<sup>528</sup> According to Gale, there will be fixed-line fibre optics to every single home and omnipresent high-speed wireless. "The government-enabled IT infrastructure will tie in seamlessly with home networks so that residents will have access to their data from anywhere in the city. All content—photos, music, files—will be unbound from home systems [and accessible through] portable devices via wireless broadband or from a city kiosk or public screen."<sup>529</sup>

But somehow Songdo just doesn't *look* as exciting as it *sounds*. Where one might expect a glittering, futuristic metropolis with new architectural forms and new urban solutions, there are only tame buildings in neatly organized blocks. The now standard eighteen-hole Jack Nicklaus golf course is underway, and Daniel Libeskind has been hired to design the requisite shopping mall. Eight-lane roads anticipate future rush hours, effectively cutting off city blocks from pedestrian access. It is hard to imagine an authentic urban street life evolving in such a sterile framework. As Gale puts it, "We know that right now we are not funky. We need artists, internet entrepreneurs, fashion designers, so we are building incubator spaces in the city to try to get the mix right. You can't manufacture grit, but you can encourage it."<sup>530</sup> In a city where everything is connected,

one might expect (or hope) to see some physical indication of this fourth layer of infrastructure, but that has yet to materialize. So why does the built form stay the same if the ways of using the city change? Perhaps an even more urgent question would be, why does this self-proclaimed City of the Future look so utterly generic?

After visiting the city in late 2009, Urban Informatics leader at Arup, Dan Hill, described his impressions on his urban design blog *City of Sound*: "I can't find a way of justifying the monumental scale and homogeneity of some of the streets, or the invitation to the private car to be the primary mode of transit, combined with an approach to retail that seems entirely articulated in terms of large shopping malls at this point."<sup>531</sup> Old ideas about celebrating diversity and human-scaled streetscapes seem incongruous with New Songdo City, as if there is no room for smallness in this great project. Quaintness and complexity appear to have been sacrificed for streamlined efficiency.

### Big Brother's got your back

Over the last four decades, South Korea has been on a mission to solidify their position as the global leader in IT technology. Well, it seems they've succeeded. This latest city to spring from the shores of Incheon uses ubiquitous information technology to make possible a series of new political, social and financial infrastructures. New Songdo City is no longer controlled by the heavy machinery of people-based politics, but by a streamlined 'e-government', a preoccupation that finds a ready home with

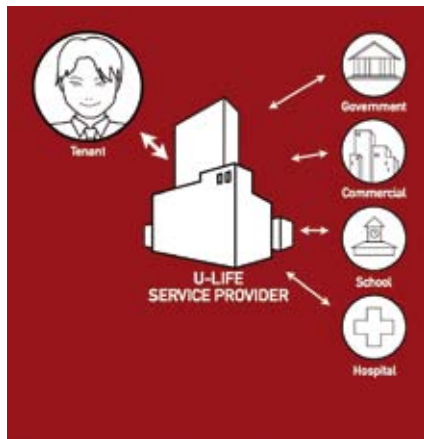
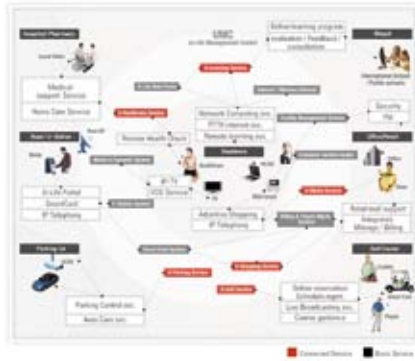
html, retrieved on June 24, 2010.

**532** Myung-je, C., "Government develops a Korean e-government model", *Korean IT Times*, September 21, 2009.

**533** E-government isn't just for bureaucrats. In an interview with the *Korean IT Times*, Minister Lee Dal-gon explained why he thinks the conversion to digital infrastructure will also improve civil services: "The government is dedicated to improving basic civil services to minimize the general public's burden when they file petitions as they seek recourse or need various services from government offices. To simplify and streamline civil services, the ministry is seeking to minimize petition processes. I'll give one such example: in the past, you had to submit seven different kinds of documents when applying for a passport in Korea. However, now you only have to submit one application form and then passport application process is complete. Last, but not least, the ministry is determined to substantially increase the kinds of civil services available online, from which citizens can request online.



The total number of civil services will increase from the current 1,800 kinds to 4,000 by the end of 2010. I expect that this will help those petitioning applicants visit government offices much less frequently, which will significantly contribute to helping the government better serve the people and at the same time help to realize the government's 'low carbon, green growth' vision at the same time." See:



Technology acts as a connecting web in Songdo, linking every aspect of life.

Myung-je, C., "Government develops a Korean e-government model", *Korean IT Times*, September 21, 2009.

534 Ibid.

535 [http://www.unpan.org/egovkb/global\\_reports/08report.htm](http://www.unpan.org/egovkb/global_reports/08report.htm), retrieved on June 24, 2010.

536 Si-young, H., "Korea: U-City Project, Next IT Agenda", *The Korea Herald*,

Cisco's 'Smart+Connected Communities' program. As the local *Korean IT Times* reported, "Through various e-government programs, the Korean government has enhanced both the efficiency and transparency of its administration management and has significantly improved its administrative services. Since the introduction of the e-government system, the government has achieved a wide range of innovations in administration management, with about 850 government and public agencies linked to each other online."<sup>532</sup>

More recently, the country has been recognized as a global leader in e-government.<sup>533</sup> According to Minister of Public Administration and Security Lee Dal-gon, "The country ranked sixth among all countries of the world in the UN's e-Government Readiness Survey in 2008. It finished second to Sweden out of a total of 154 countries in terms of ICT Development Index surveyed by the International Telecommunication Union (ITU)."<sup>534</sup> By 2010, South Korea jumped the ranks to first place in the UN's e-government development index.<sup>535</sup>

In most cities claiming to be 'hi-tech,' ubiquitous Internet capabilities are standard. The 'total connectivity' of these cities allows residents to control their immediate environments and maintain constant digital contact. In the most extreme example of this phenomenon, South Korea's new U-Cities (including New Songdo City, Hwaseong-Dongtan U-City, Future-X, and Busan City) provide a tangible example of what our future cities may look like. Local newspaper *The Korea Herald* lauded the proposal in 2005, claiming that, "U-city is intended to give its residents not only a more convenient lifestyle but also a more secure, environmental and humane way of life."<sup>536</sup>

While the omnipresent technology may sound a bit dubious to those who are still grudgingly adjusting to CCTV, in Korea, any fears about the emergence of Big Brother are largely unvoiced. In a *New York Times* article about the city's progress, journalist Pamela O'Connell summarized the contrast: "In the West, ubiquitous computing is a controversial idea that raises privacy concerns and the specter of a surveillance society... But in Asia the concept is viewed as an opportunity to show off technological prowess and attract foreign investment."<sup>537</sup> The concept is already drawing interest from Middle Eastern developers for possible applications in other contexts.

In New Songdo City each resident will have a smartcard that serves as their personal key to everything in the city. According to Mr. John Kim, Vice President for Strategy at New Songdo City Development, this key "can be used to get on the subway, pay a parking meter, see a movie, borrow a free public bicycle and so on. It will be anonymous, won't be linked to your identity, and if lost you can quickly cancel the card and reset your door lock."<sup>538</sup> While Korean legal and cultural norms present fewer barriers to the ubiquitous technology, increasing information access has brought up some new questions regarding privacy. In response

to the increasing calls for reform, the Ministry of Information and Communication plans to enact a new personal information protection bill in 2010, which will revise previous Acts from 1999, 2001 and 2008.<sup>539</sup> In response to questions about the policy direction of the new act, Minister of Public Administration and Security Lee Dal-gon reassured the public that the government was well aware of the risks. "From the recent leakage of personal information in such cases of Auction and GS Caltex, for example, more than 10 million people suffered damage from these incidents. This reminded us how important the protection of personal information is. The government therefore is pushing for the legislation of a personal information protection law to strengthen people's rights in this regard. The ministry will make sure that agencies do not make it a practice to collect unnecessary resident registration numbers of web users and will eventually replace such numbers with i-PINs. It will also enhance everybody's alertness against the illegal obtaining or supplying of personal information."<sup>540</sup>

The act will have to protect some pretty appealing targets: Songdo is certainly not a city for the lower classes. As of June 2009, an average apartment of 100 m<sup>2</sup> was selling for \$500,000.<sup>541</sup> Some flats go for two or three times that. And anyone enrolling their children at the International School is certainly not strapped for cash. The reality of this new city is that 'U-life' has become another way of branding real estate. Songdo markets itself as the world's most livable business city. They hope to achieve this by "integrating the latest IT infrastructures and information services into urban space. Technologies that are likely to be featured in U-cities include broadband convergence network, radio frequency identification, ubiquitous sensor network, home networking, WiBro, digital multimedia broadcasting, telematics, geographic information system, location-based system, smart card system and video conference technologies."<sup>542</sup>

Wealthy businessmen and women are attracted to New Songdo because of its convenience, but the U-city model touches every aspect of daily life. There are also built-in safety measures, such as the *U-museum* which tracks its visitors as they meander through the halls, tracing lost children and also apparently preventing theft (though how this works is unclear). Convenient applications like the *U-coupon* automatically pay your fee as you step across an entrance threshold. Suwon's 'U-protection' service is also noteworthy as a system which "manages health conditions of senior citizens, especially those who live alone, using 'mobile health-sensor' technologies. For example, elderly citizens with Alzheimer's disease will be identified via location-based technologies in cases that they get lost or struck with troubles."<sup>543</sup> Despite the split between Koreans and foreigners, the New Town is really only geared at one demographic: the wealthy. As author Don Southerland puts it, "Songdo IBD reflects a new global culture—one not dominated by a single nation or region, but a diverse group of people with similar tastes and needs."<sup>544</sup> It will be up to the spouses and children to create new markets and enrich the city with urban life. Until then, New Songdo City is only exciting for those that can afford it.

December 13, 2005.

537 O'Connell, PL., "Korea's High Tech Utopia, Where Everything is Observed", *The New York Times*, October 5, 2005.

538 Ibid.

539 The previous information protection acts can be found on the following websites: Act on the Protection of Personal Information Maintained by Public Agencies 1999 (Korea), [http://www.kca.go.kr/web/img/eng/1\\_1\\_ACT\\_ON\\_THE\\_PROTECTION\\_OF\\_PERSONAL\\_INFORMATION\\_MAINTAINED\\_BY\\_PUBLIC\\_AGENCIES.doc](http://www.kca.go.kr/web/img/eng/1_1_ACT_ON_THE_PROTECTION_OF_PERSONAL_INFORMATION_MAINTAINED_BY_PUBLIC_AGENCIES.doc), Act on Promotion of Information and Communications Network Utilization and Information Protection 2001 (Korea), [http://www.ecommerce.or.kr/activities/policy\\_view.asp?bNo=336&Page=1](http://www.ecommerce.or.kr/activities/policy_view.asp?bNo=336&Page=1).

540 In September 2008, GS Caltex, one of Korea's largest oil refineries, was accused of leaking the personal information of 11.1 million customers. The information, including private email addresses, telephone numbers, physical addresses and social security numbers, was stored on two multimedia disks found lying on the street. Earlier that year, the online shopping mall auction.co.kr was hacked. The hackers stole the personal information of 10.8 million customers. These two events sparked controversy over information protection. Myung-je, C., "Government develops a Korean e-government model", *Korean IT Times*, September 21, 2009.

541 <http://www.biztechreport.com/story/249-new-songdo-city>, retrieved on June 24, 2010.

542 Si-young, H., "Korea: U-City Project, Next IT Agenda", *The Korea Herald*, December 13, 2005.

543 Ibid.

544 Southerton, D.G., *Chempulpo to Songdo IBD: Korea's International Gateway*, 2009. See the ebook: <http://www.chempulosongdoibd.com/>.

545 <http://www.songdo.com/home/news/in-the-news.aspx/d=77/>







title=Songdo\_Winner\_of\_Sustainable\_Cities\_Award, retrieved on July 21, 2009.

**546** Some residents question the sustainability of 60-story towers with non-operable windows. In an interview, an early occupant of the First World development block claimed to spend more than 900,000 won [\$752] per month on



Stan Gale (right) and John Hynes III examine a model of New Songdo City in 2006.

utilities.

**547** <http://www.biztechreport.com/story/249-new-songdo-city>, retrieved on June 24, 2010.

**548** <http://www.songdo.com/home/why-songdo/sustainable-city.aspx>, retrieved on July 21, 2009.

**549** <http://www.biztechreport.com/story/249-new-songdo-city>, retrieved on June 24, 2010.

**550** <http://www.birdskorea.org/Habitats/Wetlands/Songdo/BK-HA-Songdo-Last-call-for-Song-Do.shtml>, retrieved on June 24, 2010.

**551** <http://www.birdskorea.org/Habitats/Wetlands/Songdo/BK-HA-Songdo-Reclamation-Start-2010.shtml>, retrieved on June 24, 2010.

**552** Hester, R.T., "Letter to the Lee Administration: Save the Songdo Tidal

## For the birds

In 2009, New Songdo City won the first annual Sustainable Cities Award, sponsored jointly by the Financial Times and the Urban Land Institute.<sup>545</sup>

The award was presented in recognition of the city's commitment to sustainable development.<sup>546</sup> Songdo is using both Korean and international standards (the American LEED-certification) to ensure that different aspects of the urban systems receive attention. These include water, energy use, waste, open space, transportation and operations. A central pneumatic waste collection system eliminates the need for garbage trucks, and free bikes line the sidewalks. Plans for electric buses have been made public, and "75% of the construction waste is targeted to be recycled."<sup>547</sup>

At the urban scale, the city blocks will aim for certification under the LEED-NC and/or LEED-CS rating system. Songdo IBD is also part of the LEED-ND (Neighborhood Development) Pilot Program. The LEED-ND program "emphasizes neighborhood connectivity, access to transit, energy efficiency in building design, efficient infrastructure design and the provision of open space and habitat for residents of all kinds. It builds upon the principles of New Urbanism [such as walkability] and aims to promote the incorporation of positive planning aspects into local and municipal zoning codes focused on Smart Growth, Transit Oriented Development and Green Growth."<sup>548</sup>

Songdo planners have also developed strict guidelines for water reduction, targeting a 90% reduction from the international baseline. This should be accomplished "largely through the use of efficient landscape design, water saving irrigation systems, reclaimed rainwater, and the reuse of treated greywater from a city wide central system. Public green spaces in the city are designed to use indigenous plants requiring little or no irrigation."<sup>549</sup>

And despite all efforts to the contrary, Songdo has already upset some environmentalists. Calling the development a "callous destruction of a valuable estuarine ecosystem", Birds Korea claimed "this is the sad unfolding reality of Song Do, a formerly vast area of intertidal mudflat on the edge of Incheon."<sup>550</sup> Fatally for public relations, Songdo construction began without conducting an Environmental Impact Assessment. This oversight on Gale's part caused both SAVE International and Birds Australia to file official letters of concern. The reclaimed wetlands, it seems, used to be home to more than 18,000 shorebirds. The birds in question included the endangered Black-faced Spoonbill, Saunders's Gull, Mongolian Gull and the Little Tern. Representatives from Birds Korea claim that "all four species hold breeding colonies nearby, and can be observed constantly commuting between their nest sites and the mudflat."<sup>551</sup>

In an open letter to the Lee administration, SAVE International wrote, "We are shocked by the wetlands destruction the South Korean Government continues to allow and sometimes even promotes in the name of an environmentally-friendly development, the Incheon Songdo

Tidal Flat being a primary example. We know that the Incheon Free Economic Zone (IFEZ) has already destroyed most of these critical tidal flats, but our recent site survey suggests that approximately 1000 hectares of the Songdo Tidal Flat remain, at and around the mouth of Sorae Creek. We are aware that Black-faced Spoonbills are nesting nearby. We urge the Lee government to stop any further reclamation at this site and to preserve the entirety of the remaining Songdo Tidal Flat for critically-needed wildlife habitat."<sup>552</sup> The city's official response to calls for action has been muted.

## City of the present

New Songdo City markets itself simultaneously as a sustainable city, a global business hub, an aerropolis and an oasis of shopping.<sup>553</sup> It is a city struggling to be the best in class; in every class. And this multi-billion-dollar investment is only the beginning: Songdo, really, is imagined as a template. It is only the first in what will surely be a series, given the incredible rate of urbanization in China and India, and their willingness to pay for quick solutions. If Gale has his way, each subsequent New Town will be faster and cheaper than its predecessor. The idea of such an 'instant urbanism' is startling. Especially when Songdo leaves so many questions unanswered.

Songdo could arguably be classified as an economic city since the focus of this New Town is clearly financial development. As part of the IFEZ, Songdo attracts both local and foreign businesses and is strategically placed to become a major Asian hub. The New Town's relationship with the airport is an added benefit. And from a marketing perspective, sustainability appears to be one of Songdo's great preoccupations. Ought one, then, classify the development as an eco-city? But then, upon closer examination, the sustainability targets fall oddly short of expectations for such a trailblazing project. They read like an afterthought; a last minute effort to reduce the city's impact rather than a point of departure for design. And one wonders whether the technology really will contribute to greener living, rather than simply amp up the average resident's energy usage. As Greg Lindsey says, "It's hard to see what Tele-Presence has to do with sustainability, unless you plan to shrink your carbon footprint by never leaving your house."<sup>554</sup>

While duplicates of Songdo may be springing up in China, the original version still faces some uncertainty. For now, developers are quiet about the future extensions, although the official press releases remain brazenly optimistic. Portman's involvement remains appropriately vague, while investors recover from the shock of the last economic crisis. The future growth of the New Town may be in doubt, but for the 12,000 current residents of New Songdo City, the future is already here.

Flat", The Hankyoreh, August 28, 2009.

Online at: [http://www.hani.co.kr/arti/english\\_edition/e\\_opinion/373552.html](http://www.hani.co.kr/arti/english_edition/e_opinion/373552.html)

**553** The idea of an aerropolis relates to Songdo's proximity to the Incheon International Airport. Greg Lindsey, author of the Fast Company article quoted in this chapter, has recently published *Aerropolis: The way we'll live next with John Kasarda*. In this book the authors claim that airports have become the center of modern transport systems and that future cities will evolve in relation to these hubs. For more, see: Kasarda, J. and Lindsey, G., *Aerropolis: The way we'll live next*. Farrar, Straus and Giroux, New York, 2011.

**554** Lindsey is quoted in: Arlidge, J., "Metropolis Now", *Wallpaper*, October, 2010, p. 264.

**555** Yee, C.M., "Malaysia's 'Super Corridor' fails to attract financial



The KPF-designed public park is based on New York's Central Park.



# Cyberjaya Malaysia

**Developer:**  
Setia Harunman SDN BHD

**Date:**  
1997 - ongoing

**Status:**  
Under construction

**Size:**  
29 km<sup>2</sup>

**Location:**  
2°55'30.32"N, 101°39'26.57"E

**Current residents:**  
10,000 (with 27,000 daily  
commuters)

**Cost:**  
\$20 billion



water built area New Town highway

5km





At Cyberfusion 2009 in Cyberjaya, 274 people set a world record by playing video games for 40 hours non-stop over LAN.



### The first smart city

In 1995, McKinsey & Company, a global consulting firm, suggested the idea of an 'Asian Silicon Valley', or 'cyber city' to the Malaysian national government. McKinsey suggested that a regional ICT hub would be a visionary and economically viable way forward for the country.<sup>555</sup> The solution, in the form of Cyberjaya, was heavily promoted by Malaysia's fourth prime minister, Yabhg Tun Dr. Mahathir Mohamad. The New Town was considered a critical part of a deliberate strategy to strengthen the country's status as a Knowledge Based Economy. The Town & Country Planning Department of the Ministry of Housing and Local Government implemented the planning process, and in 1996 the various agencies agreed upon a 29 km<sup>2</sup> site just west of Putrajaya as the New Town's future home. The site of the New Town was originally covered in oil palm plantations, rolling hills and natural lakes; today, half of the Cyberjaya's total land area still remains undeveloped.

Although it was originally imagined as a private initiative, the Asian financial crisis forced the national government to step in. In 1996, state-owned Cyberview took over as landowner and developer. Initial studies suggested that about 2,400 inhabitants were already living on the site designated for future development. Although the government classified the site as 'greenfield', the 2,400 residents were hardly camping out. In fact, the residents in question were employees of four different palm plantations. The workers were immediately issued employment termination notices and asked to leave.<sup>556</sup> Eventually, they were relocated to low-cost apartment blocks outside of Putrajaya, but only after months of arguing between the federal government, Selangor state government and the Malaysian Indian Congress.<sup>557</sup>

The prolonged relocation fiasco dealt another blow to Cyberjaya's shaky reputation. When it was first introduced on the global stage, the New Town was met with approval and applause for the government's forward-thinking plan. By 1998, however, international opinion had turned sour as the country faced a crippling economic crisis, political unrest and violent street demonstrations. The Malaysian government was criticized for launching an IT-city while simultaneously cracking down on information exchange. As websites were systematically blocked and protesters arrested, former US Vice President Al Gore joined the growing outcry against Malaysia when he pointedly told delegates at the Asia Pacific Economic Cooperation conference, "Any government that suppresses information suppresses the economic potential of the Information Age."<sup>558</sup> Critics questioned whether Cyberjaya's goals of innovation and international collaboration could flourish in an environment of political repression.

Since this baptism by fire, Cyberjaya continues to face the conundrum of heavy government involvement mixed with a desire to promote innovation and experimentation. Unfortunately, the New Town's biggest proponent may have been its biggest liability. During former Prime Minister Mahathir's administration, he consistently embarrassed

attention", *The Wall Street Journal*, March 28, 2001.

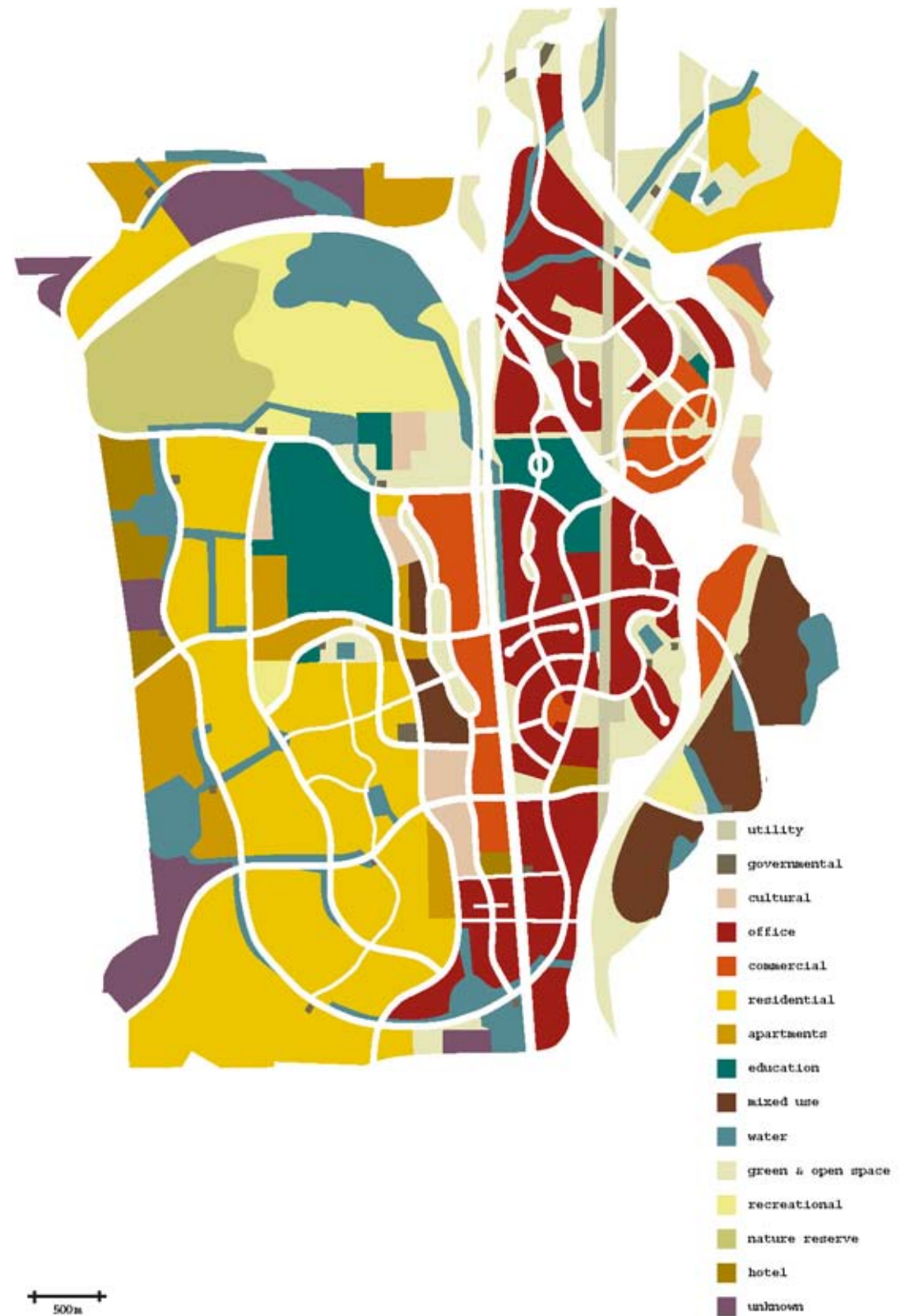
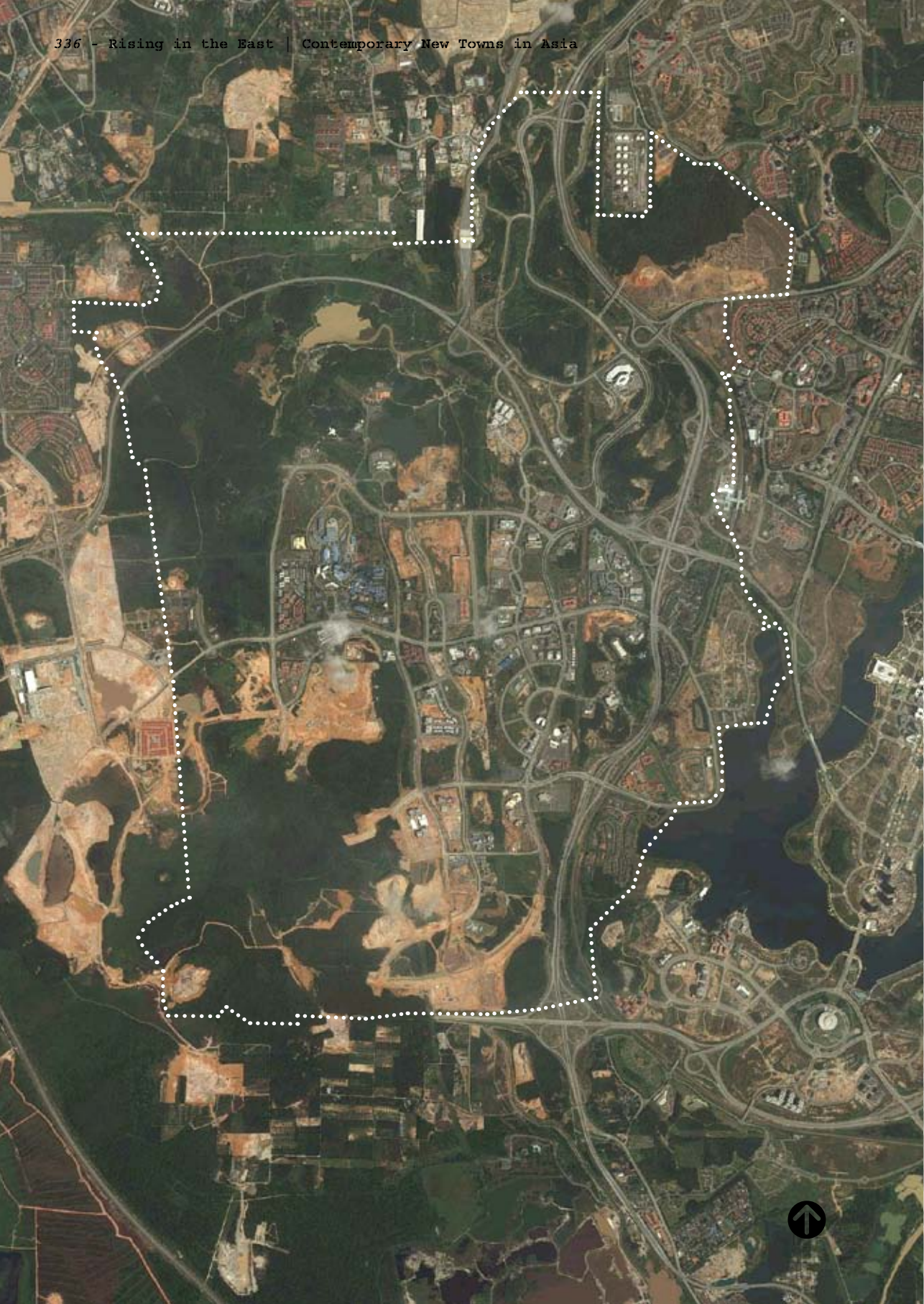
**556** King, R., Kuala Lumpur and Putrajaya: negotiating urban space in Malaysia, NUS Press, Singapore, 2008. p. 132.

**557** Bunnell, T., "Cyberjaya and Putrajaya: Malaysia's Intelligent Cities", in: Graham, S. (ed), *The Cyber Cities Reader*, Routledge, London, 2004, p. 351.

**558** Former Vice President Al Gore speaking to delegates at the Asia Pacific Economic Co-operation (APEC) Summit, Kuala Lumpur, Malaysia, November 16, 1998.

**559** Anwar was accused of corruption and sodomizing a male assistant in 1999.





500m



His conviction on sodomy charges led to his arrest and subsequent jail time. In 2004, the Malaysian court overturned the ruling and he was released. In 2008, Anwar was once again charged with sodomy and is currently on trial. See: <http://english.aljazeera.net/news/asia-pacific/2008/07/200871664421573682.html>, retrieved on March 1, 2011. See also: Colmey, J., "How dare you say these things!", TIME Asia, June 15, 1998.

**560** King, R., Kuala Lumpur and Putrajaya: negotiating urban space in Malaysia, NUS Press, Singapore, 2008, p. 145.

**561** The Japanese government occupied the islands for three years, between 1942 and 1945. The Malayan Union was established in 1946, replaced in 1948 by the Federation of Malaya. The Federation of Malaya was plagued by guerilla fighting to expel the British who considered the inhabitants to be under their 'protection'.

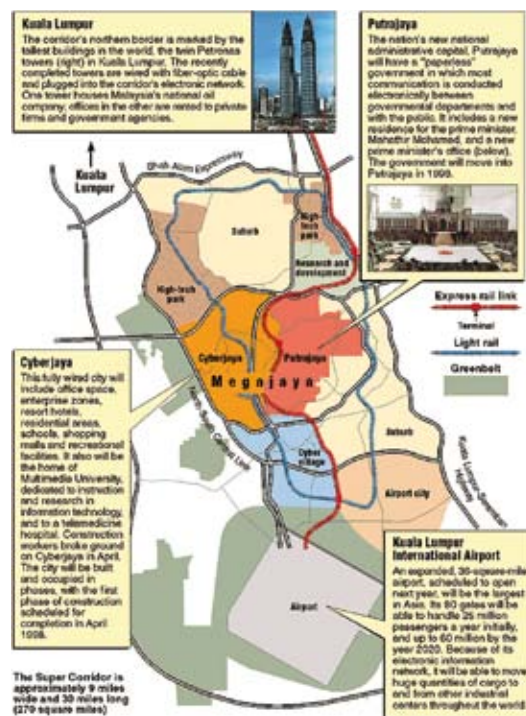
On August 31, 1963, the British protectorates were granted independence and officially formed Malaysia on September 16, 1963.

**562** Kuala Lumpur's population was swollen due to an influx of migrants

multinational investors by blaming others for the country's woes and orchestrating what many considered to be the politically motivated arrest of Deputy Prime Minister Anwar Ibrahim.<sup>559</sup> Mahathir left office in 2003, but his legacy remains. Since his departure, Cyberjaya has not evolved into the hi-tech hub that was once envisioned. Instead, the New Town is home to just 10,000 residents, an array of call centers and data processing firms—endeavors that markedly do not create Prime Minister Mahathir's imagined "environment in which creativity can soar and innovative thinking can take fire."<sup>560</sup>

## A history of New Towns

The land now called Malaysia has known human habitation for tens of thousands of years. As a result of its convenient position in Southeast Asia, the peninsular and island nation has long been a center of trade and cultural exchange. As early as the 1st century AD Chinese and Indian merchants used the islands as an important stop on trade routes. Towns, ports and harbors grew as result of these exchanges. While it was ruled as a series of dynastic empires for many centuries, in 1511 Portuguese colonists took over the main commercial centers, which were later claimed by the Dutch, and eventually signed over to the British in 1795. Most of what is now called Malaysia was ruled as a British colony or protectorate until the nation achieved independence in 1963.<sup>561</sup>



Malaysia's Multi-media Super Corridor (MSC) covers 750 km<sup>2</sup> from the Petronas Twin Towers to the Kuala Lumpur International Airport. It was started by Prime Minister Mahathir in 1996.

While still under British rule after WWII, Malaysia faced a serious shortage of housing. In 1952, Petaling Jaya (or 'PJ') was planned and constructed by the British colonial government as the nation's first New Town. Designed by Sir Gerald Templer, PJ was conceived as a satellite township for overcrowded Kuala Lumpur.<sup>562</sup> During the 1950s, the country used Resettlement New Villages as a way to "cut off supplies to the communist insurgents and to deny them access to the civilian population."<sup>563</sup> Malaysia continued to employ a New Town building policy after achieving independence from the United Kingdom. In the mid-1960s, Shah Alam became the first New Town planned and built by the new Malaysian government.<sup>564</sup> The New Town's layout reflected that of PJ, with clear design influences from Howard's Garden City movement and a calculated combination of residential, industrial, administrative and commercial areas.

Until the 1970s, New Town construction was concentrated in the Klang Valley, but development soon spread beyond Selangor. Over the next two decades, Malaysia built 50 New Towns, largely divided into two approaches: one type of New Town was a suburban satellite, "sited on the fringes of large metropolitan areas, with the prime objective of mitigating metropolitan problems and congestion."<sup>565</sup> The second type was a sort of frontier town, meant to supply the urban services generally lacking in rural areas. These frontier towns include Bandar Pusat, Bandar Tenggara and Bandar Muadzam Shah, and were seen as a way of developing agricultural and industrial processes throughout the country.

At the end of the 1980s, in the midst of rapid economic growth and spreading urbanization, the Economic Planning Unit of the Prime Minister's Office began developing the idea of a New Federal Administrative District. Officials thought the new center would "improve the urban environment and... sustain Kuala Lumpur as a premier business center."<sup>566</sup> After examining a series of alternative sites, the national government decided on Perang Besar in Selangor, primarily because of its proximity to the planned international airport, as well as downtown Kuala Lumpur. In 1993, the decision eventually led to the establishment of Putrajaya Holdings Sdn. Bhd—the developer for the New Town.<sup>567</sup> Putrajaya's success became the catalyst for Cyberjaya, which was imagined as a complimentary New Town. While Putrajaya was the political and administrative center of the country, Cyberjaya was expected to become the national core of IT innovation and development; a 'cyber city' for the future.



Putrajaya, the new government center adjacent to Cyberjaya, 2010.

## 'Malaysia's gift to the world'

In 1991, former Prime Minister Mahathir introduced Wawasan 2020 ('Vision 2020'). The Vision provided a comprehensive analysis of how

following WWII. The capital's population grew by nearly 100,000 between 1947 and 1951, creating a great need for new housing projects. For more on the history of Petaling Jaya, see: McGee, T. G. and McTaggart, W.D., Petaling Jaya: A socio-economic survey of a New Town in Selangor, Malaysia, Victoria University of Wellington, New Zealand, 1967.

**563** Thong, L. B., "New Towns in Malaysia: Development and Planning Policies", in: Philips, D.R. and Yeh, A.G.O. (eds), New Towns in East and South-east Asia: Planning and Development, Oxford University Press, Oxford, 1987, p. 153

**564** For more on Shah Alam, see: Mohd-Nayan, N.A., The New Town of Shah Alam, Malaysia: A case study of third world urban planning and development, University of Nebraska, Lincoln, 1989.

**565** Thong, L.B., "New Towns in Malaysia: Development and Planning Policies", in: Philips, D.R. and Yeh, A.G.O. (eds), New Towns in East and South-east Asia: Planning and Development, Oxford University Press, Oxford, 1987, p. 153.

**566** Marshall, R., Emerging Urbanity: Global Urban Projects in the Asia Pacific Rim, Spon Press, London, 2003, p. 179.

**567** Putrajaya Holdings is owned by a combination of public and private shareholders, including Petronas, Khasanah

Nasional Berhad and then Kumpulan Wang Amanah Negara. See: Marshall, R., Emerging Urbanity: Global Urban Projects





The Community Center (Taman Tasik Cyberjaya) provides a striking architectural focal point on the pond that is the central structuring element in Cyberjaya's masterplan, 2010.

in the Asia Pacific Rim, Spon Press, London, 2003, p. 179.

**568** Wawasan 2020: 1991 – 2020. The Economic Planning Unit, Putrajaya, 2010.

**569** Prime Minister Dr. Mahathir bin Mohamad, quoted in: Marshall, R., Emerging Urbanity: Global Urban Projects in the Asia Pacific Rim, Spon Press, London, 2003, p. 169.

**570** <http://www.cyberjaya-msc.com/msc.asp>, retrieved on February 10, 2011.

Malaysia might move forward, with the ultimate goal of becoming a fully industrialized nation by 2020. The series of policy targets encompassed various aspects of life, including education, economy, industry, agriculture and the development of “a psychologically liberated, secure... society.”<sup>568</sup> A major part of this vision was the creation of the Multimedia Super Corridor, a huge swath of land to be used, according to Mahathir, as a “giant test-bed for experimenting with not only multimedia technology, but also, and more importantly, the evolution of a new way of life in the unfolding age of information and knowledge. The MSC is, therefore, ‘Malaysia’s gift the world.’”<sup>569</sup>

Implementation of the corridor was planned for three phases, to be completed between 1996 and 2020. During Phase 1 (1996-2003), MSC-Malaysia was successfully established. According to Cyberjaya's website, “every milestone set for Phase 1 [was] surpassed. In Phase 2, a web of similar corridors will be established in Malaysia, and a global framework of cyberlaws will be passed; furthermore at least four of five intelligent cities will be linked to other global cities worldwide. In Phase 3, Malaysia will evolve into one Multimedia Super Corridor. An International Cybercourt

of Justice will be established in MSC-Malaysia and twelve intelligent cities will be linked to the global information highway.”<sup>570</sup>

The corridor currently spreads across 750 km<sup>2</sup> in a 15 x 50 km swath, from the Petronas Twin Towers in the north to the Kuala Lumpur International Airport in the south. As described in the project's *Urban Design Guidelines* handbook, MSC Malaysia was designed according to the following design principles: “Human oriented intelligent city in harmony with nature; Harmonious relation between Man and His Creator; Man and Man, Man and Technology and Man and Environment; Low density living environment; Ecological and environmental planning with lush tropical landscape; Human focus design with ‘barrier free’ living; Advanced telecommunication infrastructure for the multimedia/IT industries; [and] Comfortable and efficient urban infrastructure.”<sup>571</sup> The Corridor currently hosts more than 900 multinationals, including Shell, EDS, Ericsson, BMW, HSBC and DHL, along with hundreds of other foreign-owned and Malaysian companies involved in telecommunications and multimedia. It is conceived as a regional ICT hub for services, manufacturing, research and development.

**571** “Urban Design Guidelines: Vol. 2, Development Controls”, Town and Country Planning Department, March 31, 1997, chapter 6, p. 4.

**572** [http://www.neocyber.com.my/about\\_cyberjaya/mdec.aspx](http://www.neocyber.com.my/about_cyberjaya/mdec.aspx), retrieved on



February 2, 2011.

**573** <http://cyberview.com.my/v2/corporate-profile.php>, retrieved on February 10, 2011.

**574** Symphony Hills Sdn. Bhd. (2010).

Symphony Hills: Cyberjaya [Brochure], p. 5.

**575** Op. cit. p. 9.

**576** Op. cit. p. 11.

As head developers of the Corridor, the Multimedia Development Corporation (MDeC), was incorporated under the Companies Act of Malaysia, and is now owned and funded by the national government. MDeC acts as an advisor to the government on legislation, multimedia operations standards, MSC-specific practices, and policy.<sup>572</sup> They also promote MSC Malaysia internationally, support companies within the MSC and are one of Cyberjaya's key stakeholders. Other stakeholders include Setia Haruman Sdn Bhd, a private builder and developer, and

Majlis Perbandaran Sepang (the Sepang municipal council). Currently, Cyberjaya is managed by the state-owned company Cyberview Sdn Bhd. The company is also the New Town's landowner, and as such Cyberview's responsibilities include: ensuring the New Town is developed in accordance with MSC Guidelines, providing assistance and support in coordinating joint activities with local organizations, local land administration, advising the government on Cyberjaya-related issues, building support amenities, and continuing rehabilitation and maintenance work.<sup>573</sup>

### The intelligent city

The roads sweep through the New Town in wide arcs and organic forms, allowing access to the extremely low-density urban fabric. As built, Cyberjaya is surprisingly sparse. The center of the New Town is almost entirely offices, with a few restaurants and cafes for lunch breaks. Massive parking lots and wide roads give the New Town a rather 'American' urban form. Forests and undeveloped green space block sight lines and obscure a clear impression of the 30 km<sup>2</sup> area. The ten-lane highway dividing Cyberjaya and Putrajaya is the New Town's the only proper boundary; to the west, construction trucks gradually give way to natural vegetation, and roads stop abruptly in the middle of uncleared forests. After fourteen years, Cyberjaya is clearly still a work in progress.

Symphony Hills is one of the more recently built neighborhoods in Cyberjaya. As the Symphony Hills brochure proclaims, this area is filled with "stately homes of exquisite beauty... set within immaculate precincts as lovely clusters with gardens. The homes flow seamlessly into dramatic landscapes of lush greenery. At the heart of this suburban paradise lies a spectacular floating resort clubhouse that serves as the nexus of the community."<sup>574</sup> The neighborhood is broken into four communities:



Multimedia University in Cyberjaya, 2010.



Inside the Multimedia University library, 2010.



Century Square is a new residential extension just north of Cyberjaya, 2011.

Beethoven, Mozart, Schumann and Schubert. Each community is made up of a specific housing typology. Beethoven is filled with large twin villas, Mozart with garden terraces, Schumann with townhouses connected to the park and Schubert with terraced housing, also connected to the park. In Beethoven, the most luxurious villas are 525 m<sup>2</sup>—large enough to accommodate an extended family. The architecture is realized in a contemporary, non-specific style, with large windows, quadrilateral forms, and gabled roofs. Inside, "living spaces are expansive and devoid of columns. High ceilings and windows, large doorways, airy courtyards and a spacious *lanai* [veranda] that opens to the natural exterior, add to the grandeur and bathe homes in sunshine and fresh air."<sup>575</sup> Security is ensured by gated entrances that require visitors to obtain permits, video intercom and CCTV, coupled with private video intercom and CCTV systems. Homes can be automated via the owner's iPad, and "the Precinct Command Center is immediately alerted if garden perimeters are traversed and a trespass or emergency occurs within your home."<sup>576</sup>

Cyberjaya was planned with an emphasis on a series of ideal characteristics, including: "Intelligent City, City in a Garden, Neighborhood Concept, Environmental Friendly, Efficient Transportation System, Effective Public

**577** "Urban Design Guidelines: Vol. 2, Development Controls", Town and









Country Planning Department, March 31, 1997, chapter 6, pp. 13-15.  
**578** Of our case studies, Tianjin, China, and New Songdo, South Korea, were

Utility and Green Belt Concept.”<sup>577</sup> The concept of the ‘intelligent city’ or ‘smart city’ is not unique to Cyberjaya, although the New Town was one of the earliest applications. Since the 1990s, this strategy has been adopted by public authorities in Singapore, China, the United States, and South Korea.<sup>578</sup> The Intelligent Community Forum (ICF) makes an annual analysis and ranking of these cities, both to celebrate successful communities and inspire the use of broadband infrastructure in other cities. According to author Nicos Komninos, however, Cyber Cities and Intelligent Communities are two distinct scientific paradigms.<sup>579</sup> Komninos claims that “Cyber Cities perceive spatial intelligence as a problem of telecommunication infrastructure, digital networking, sensors, intelligent agents, online software applications, and automation in the collection and processing of information; as a pure problem of communication technology and artificial intelligence. At the other end of the spectrum, theories about intelligent communities and intellectual capital for communities understand intelligent cities as a combination of human skills, learning institutions and digital technologies; integration of these three ingredients enables city intelligence to emerge, and for new city functions, such as strategic intelligence, technology acquisition, and innovation, to materialize.”<sup>580</sup>

Cyberjaya’s other characteristics are more familiar to urban planners and designers. The idea of a planned city with a low-density urban fabric and a high percentage of green space has been around since Howard’s Garden City movement. The neighborhood concept is another familiar planning principle, although it varies in form and quality across cultures. In general, we can imagine a neighborhood as an area of walkable scale, with a high proportion of residential units and an identifiable center. The center generally offers a combination of public green space and community facilities such as religious buildings, schools, or other civic structures.

In terms of transportation connections, the New Town is well connected to both Kuala Lumpur and Putrajaya. Kuala Lumpur is accessible by the Express Rail Link, as well as the new Maju Expressway (MEX) which shortens the commute time from 40 to 20 minutes. The KL-Putrajaya/Cyberjaya dedicated highway is another quick link between the old capital and both New Towns. The North-South Highway, B15 Highway, LDP, SKVE and ELITE highways provide additional access. The Express Rail Link connects Cyberjaya to the Kuala Lumpur Airport in 30 minutes, and Cyberjaya is virtually next door to Putrajaya—just ten minutes away by car.

An aspect of the plan that may be less familiar to planners is Cyberjaya’s ‘brain’. The City Command Center (CCC), “integrates systems and subsystems within the city and provides value-added services for the residents within a citywide community network, which provides interactive broadband services and fast Internet access.”<sup>581</sup> Designed by FSBM, one

ranked as ‘Smart21 Communities’ of 2010. See: [https://www.intelligentcommunity.org/index.php?src=gendocs&ref=Smart21\\_2009&category=Events](https://www.intelligentcommunity.org/index.php?src=gendocs&ref=Smart21_2009&category=Events), retrieved on February 2, 2011.

**579** Komninos, N., *Intelligent Cities and Globalization of Innovation Networks*, Routledge, New York, 2008, p.111.

**580** Ibid.

**581** Op. cit. Marshall, R. p. 173.

**582** <http://www.fsbm.com.my/projects/cyberjaya-city-command-centre.html>, retrieved on February 11, 2011.

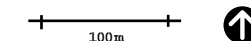
**583** “Cyberjaya at the Forefront of Green Technology”, *Bernama*, November 30,

Typical Cyberjaya neighborhood



of Malaysia’s largest information technology service and systems providers, the CCC, “will enable all the serving authorities in the city to provide efficient and responsive services to the residents and businesses. It will be the single point of contact for all types of enquires, service requests, billings, payments, etc. Using state-of-the-art intelligent systems and applications, CCC will act as a central monitoring hub for the integration, management and monitoring of emergency services, traffic management, utility services, fault tracking, distribution of work orders, etc.”<sup>582</sup>

- twin villas
- future development
- row housing
- townhouses
- retail
- community





2010.

**584** Cheong, J., "Cyberjaya", KLUE Magazine, May 2010, p. 68.

**585** King, R., Kuala Lumpur and Putrajaya: negotiating urban space in Malaysia, NUS Press, Singapore, 2008, p. 145.

**586** "Malaysia's Highflying Cybercity", Malaysian Business, December 1, 2010.

**587** <http://www.cyberjaya-msc.com/msc.asp>, retrieved on February 10, 2011.

And although Cyberjaya's environmental friendliness may currently be up for debate, that is set to change in the coming years. At the end of 2010, Prime Minister Datuk Seri Najib Tun Razak announced that Green Technology would be one of the new economic drivers for the nation. Cyberjaya was designated as the nation's pioneer green city. As part of the new focus on green technology, Cyberjaya subsequently introduced 'iGREET' (information on green technology). iGREET is a series of monthly workshops and lectures held at the Cyberjaya Clubhouse that provide a public forum for discussions on new sustainable urban strategies. Thus far, iGREET participants have discussed, "greywater collection, and treatment and reuse, energy-efficient LED lighting solutions, organic waste management for power generation solutions and the Green Building Index (GBI)."<sup>583</sup> Cyberjaya's interest in green development is relatively new, but encouraging public dialogue is certainly a step in the right direction.

### Inner-city sprawl

As part of the strategy to encourage education and grow more domestic experts, four universities are spread across the New Town: LimKokWing University of Creative Technology (LUCT), Multimedia University (MMU), Cyberjaya University College of Medical Sciences (CUCMS), and Cyberjaya International College. Though they attract day students, the universities are vacated by evening and do little to inject vitality in Cyberjaya. Lack of nightlife is thus a common complaint among residents. In fact, most inhabitants claim that neighboring Putrajaya is more exciting. As Julian Cheong puts it, "Despite its profound contribution to the technological importance of the nation, life in Cyberjaya can be somewhat wanting. The lack of that 'happening' factor where the town is devoid of the vibrancy of life—particularly nightlife—is the reason why the neighbourhood is easily passed over by many, in favor of the more upbeat Putrajaya."<sup>584</sup>

There are, however, advantages to the New Town that maintain their appeal in today's market: "Labour costs are low, land is cheap, corporate taxes are nil for a minimum five years and a multi-ethnic, multi-lingual population gives incomparable advantages in regional and even global communication."<sup>585</sup> These resources have helped Cyberjaya attract multinational corporations and fill some residential neighborhoods. But one of the New Town's biggest problems has simply been getting built. Cyberjaya is one of the oldest New Towns in this overview, and as such one would expect it to be one of the most mature. Land use statistics reveal the New Town's uncommonly slow development: "the two biggest segments are the residential category at 625.6 ha (22.47%) and the enterprise category by 472.4 ha or 17%... Of the remaining land tract, another 13.2% of the land is still under construction, 12.5% in the planning stage while the balance of 50.6% is still available for development."<sup>586</sup>

Much like Cyberjaya's contemporaries in Indonesia and Vietnam, safety and security are major selling points, and developers continue to be

optimistic about the New Town's prospects. Over the next ten to fifteen years, Cyberjaya is expecting a major population growth. While it is currently home to just 10,000 residents, official estimates put the 2020 population at 210,000.<sup>587</sup> With so much land still available, the potential for success is certainly still there.

It is doubtful, however, that Cyberjaya can become the economic and educational driver that was first imagined. Although it has certainly contributed to Malaysia's place on the global stage, the New Town is simply not attractive enough to compete with neighboring Singapore and other regional ICT hubs. As technology continues to evolve, Cyberjaya may find its niche. Until then, the New Town would do well to focus on developing a vital urban environment. Attracting residents and building up a lively social environment can only increase the value of this not-so-intelligent New Town.

**588** See: State of the World's Cities

2010/2011; Cities for all, bridging the urban



“When the planning purpose is purely residential, these satellite cities run a great risk of becoming the dreaded ‘bedroom communities’.”

## Chapter 6: Shelter Cities: Enjoy the Commute

Shelter Cities are a direct result of burgeoning urban populations. As more and more people move from rural areas to cities, local and regional governments begin looking for strategies to house these newcomers. Often, planners turn to New Towns as a way of distributing the population across a series of nodes, rather than overextending the resources of a single megacity. New towns lend themselves to those two favorites of politicians: order and control. When they are planned in a top-down manner, New Towns can become the ultimate discipline tool. For planners working under an authoritarian political regime, this is an effective way of apportioning land and resources, distributing industry and employment and, perhaps most importantly, tailoring specific demographics. The type of housing built in each New Town is often the determining factor in the area’s eventual social fabric. Obviously, where only social or public housing is constructed, a predominately lower class society will emerge. Likewise, where expensive, exclusive villas are the rule, the upper echelons of society will become a majority.

However, when the planning purpose is purely residential, these satellite cities run a great risk of becoming the dreaded ‘bedroom communities’. The classic source of this urban affliction is a lack of employment opportunities. Inhabitants are forced by circumstance to commute to the larger, central city during the day, returning home only to sleep. This type of New Town is often developed with only housing, schools and retail. When they are developed with too few amenities and too few job opportunities, Shelter Cities easily fall into this planning trap.

Tin Shui Wai, a New Town in the northwestern part of Hong Kong’s New Territories, is one of the most agitating examples of bedroom community syndrome. Because of complications with public transport connections and social problems, Tin Shui Wai became known early in life as the ‘City



of Misery'. A high proportion of immigrants from mainland China, coupled with the somewhat alienating urban structure of high-rise residential towers and few public amenities, proved to be a catastrophic mix for this notorious New Town.

Hong Kong media fueled the fire, reporting on the New Town's unusual frequency of horrific crimes, spousal abuse, and suicide. Movies were made using Tin Shui Wai as the backdrop for a dark underworld, exaggerating the New Town's grim reputation. The media attention, however, worked the New Town's advantage. Today, better support programs and community outreach facilities are helping the Tin Shui Wai transition into a healthy urban environment. Many of the cities' troubles stemmed from a combination of planning oversights and a general lack of social infrastructure, both of which are now being addressed. Tin Shui Wai's subsequent evolution provides strong examples of both alarming planning failures as well as instructive restoration policies.

In Bumi Serpong Damai (BSD City), just outside of Jakarta, Indonesia, we see the opposite planning struggles. BSD City straddles the line between Leisure City and Shelter City because of its uniformly wealthy population. The inhabitants of this New Town are far richer than those people who live outside the borders of BSD City. As a Shelter City catering to the rich, BSD has a surfeit of recreational and entertainment facilities. Restaurants, shopping centers, amusement parks, golf courses and theatres appear throughout this New Town. Employment opportunities, however, are limited to these auxiliary amenities, and most breadwinners are forced to commute to downtown Jakarta for work.

BSD City's low-density, 'picturesque' organization is also the urban opposite of the Tin Shui Wai's high-rise landscape. In BSD City, the detached single-family house predominates. The villa is upheld as the paramount social ambition, a construction supported by developers and planning officials.

Sometimes a single New Town is not enough to accommodate projected growth, and an entire series of New Towns are planned in a loose ring around the larger mother city. This polycentric organization creates a network of infrastructure around and through the central city, while still satisfying the need for housing. In Shanghai, for example, the ten New Towns ringing the city are part of a decentralized planning model for the entire metropolitan area. The scheme is conceived as a way of preventing urban sprawl and organizing regional development. Each New Town is given a stylistic theme as a way of luring new residents. Universities, industries and other 'attractors' are divided among the New Towns to encourage disbursed economic growth. Songjiang New City is one of these satellite cities.

Songjiang combines the planning models of BSD City and Tin Shui Wai. The majority of inhabitants occupy towers and mid-rise apartment blocks, while a central neighborhood in Mock Tudor style supplies the city with a dose of widely spaced villas. Universities, industry, retail and commercial spaces provide ample employment and the New Town's public transport connections to downtown Shanghai ensure continued interaction between the two.

Each of these case studies reveals different aspects of the motivations and suppositions that drive contemporary New Town planning in the Asia. The continent's unparalleled pace of urbanization creates a need for new planning solutions, while, in the case of Shelter Cities, age-old planning problems continue to appear. In order to successfully house Asia's projected increase of 1.8 billion city dwellers by 2050, government bodies and private developers cannot afford to repeat the same mistakes.<sup>588</sup> Learning from 'failed' New Towns, as well as best practice examples, can help planners create thriving urban environments.

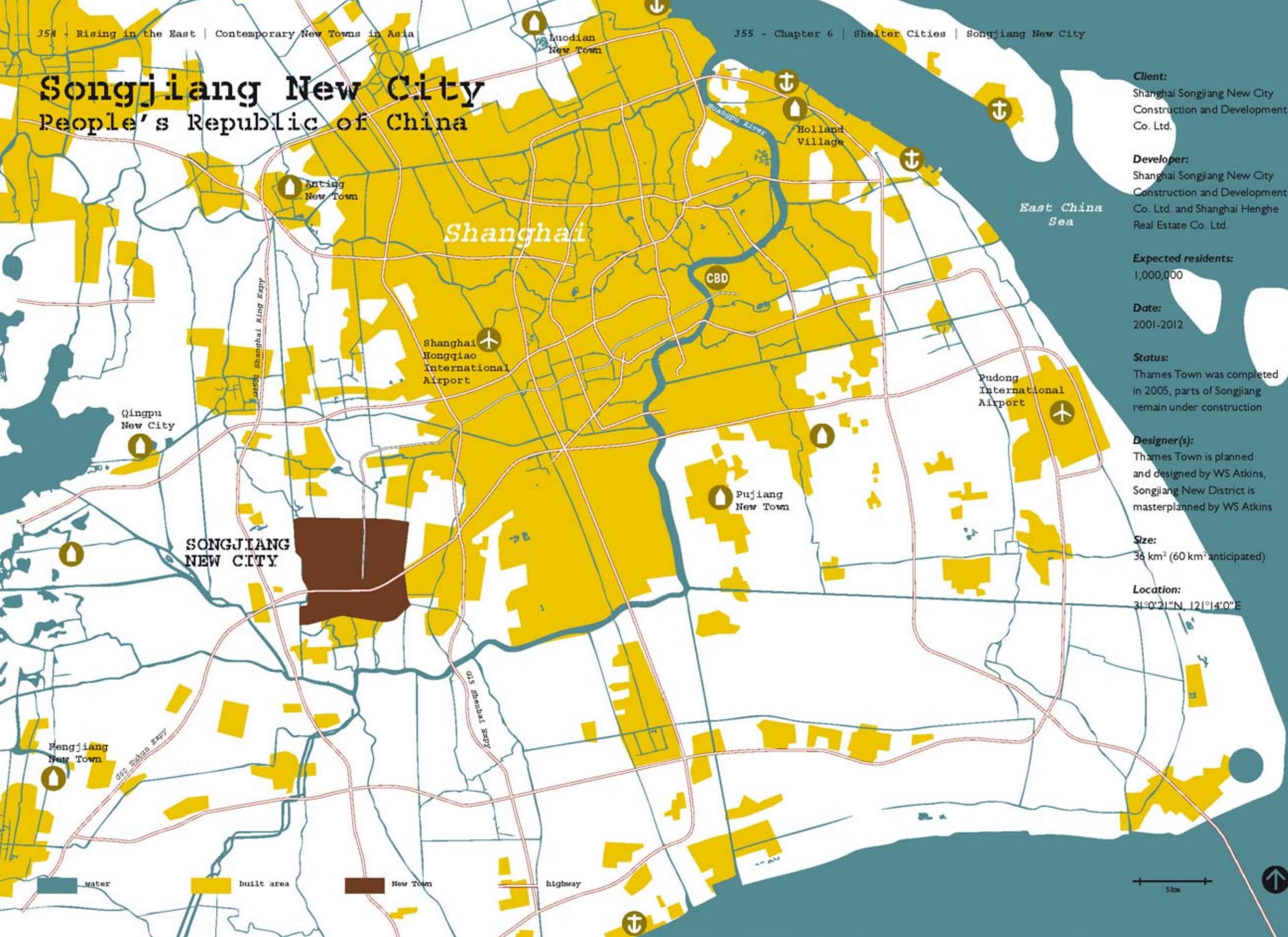
divide. UN HABITAT, 2010.

**589** The original 'One City Nine Towns' project was updated with the 10th Five



# Songjiang New City

People's Republic of China



**Client:**  
Shanghai Songjiang New City Construction and Development Co. Ltd.

**Developer:**  
Shanghai Songjiang New City Construction and Development Co. Ltd. and Shanghai Henghe Real Estate Co. Ltd.

**Expected residents:**  
1,000,000

**Date:**  
2001-2012

**Status:**  
Thames Town was completed in 2005, parts of Songjiang remain under construction

**Designer(s):**  
Thames Town is planned and designed by WS Atkins, Songjiang New District is masterplanned by WS Atkins

**Size:**  
36 km<sup>2</sup> (60 km<sup>2</sup> anticipated)

**Location:**  
31°0'21"N, 121°14'0"E

water built area New Town highway

50m



The nine New Towns surrounding Shanghai have themed centers that use historic European architectural styles as a way to create identity. Holland Village, designed by the Dutch firms Kuiper Compagnons and Atelier Dutch, acts as an attractor mechanism for Gaogiao New Town.



### 'In pursuit of a wonderful time in classic Europe'

The cobblestones click underfoot as we pass the familiar portly figure of Winston Churchill, lovingly reproduced in brass. A sweeping Gothic cathedral rises in front of us, one that is almost an exact copy of Christ Church in Bristol. The unsettling familiarities continue as we enter a neighborhood of Victorian and Georgian houses lined up neatly along pedestrian streets. A local pub (the doppelganger of a pub in Dorset) completes the picture.

But something is off. Giles Gilbert Scott's iconic red phone booths display Chinese characters instead of the ubiquitous 'Telephone'. Brides run through the streets, laughing, chased by photographers who encourage them to pose in front of the cathedral doors. But the rest of the wedding party is strangely absent. In Thames Town, the brides only come to the church to find an exotic background for their wedding photos. The village simulacrum is a stage set, a miniature Disneyland pasted into one square kilometer of China, to lend identity to a New Town. It is indeed a small world after all.

Songjiang New City is the 'One City' in Shanghai's 'One City Nine Towns' project.<sup>589</sup> The aptly-titled project was started in 2001 as a way for the city to alleviate stress on the urban core, while at the same time providing housing for an exploding population. As the brainchild of Liangyu Chen, mayor of Shanghai from 2001-2003, the internationally-themed New Towns act as attractor mechanisms for residents. The urban restructuring program was agreed upon within the context of the 9th Five Year Plan (1996-2000), and then officially confirmed during the 10th. The New Towns were just part of a much larger national urbanization plan begun in the 1990s. This expansion is known as the '1966-Plan' ('one-nine-six-six' refers to one city center, Shanghai, with nine new cities, sixty New Towns and six hundred new village centers). The decision to provide each Shanghai district with a New Town (and one city) was intended to solve the issues of overcrowding while strengthening a support system for Shanghai and crystallizing regional infrastructure.

Shanghai's subsequent 'One City, Nine Towns Development Plan' began as one of the case studies of the 1966 Plan in 2001. For the international media, the government's decision to create ten new urban cores was seen as less controversial than the decision to clad those towns in foreign costumes. In Songjiang, although the new city sprawls across 36 km<sup>2</sup>, it is the comparatively small one-square-kilometer Thames Town that has gained notoriety across the world. When it was announced that the 'One City Nine Towns' project would feature Italian, English, German and Dutch traditional architecture styles, the media criticized the developments for patronizing Shanghai's history of foreign concessions. For a city still struggling to clarify its own identity in the wake of decades of

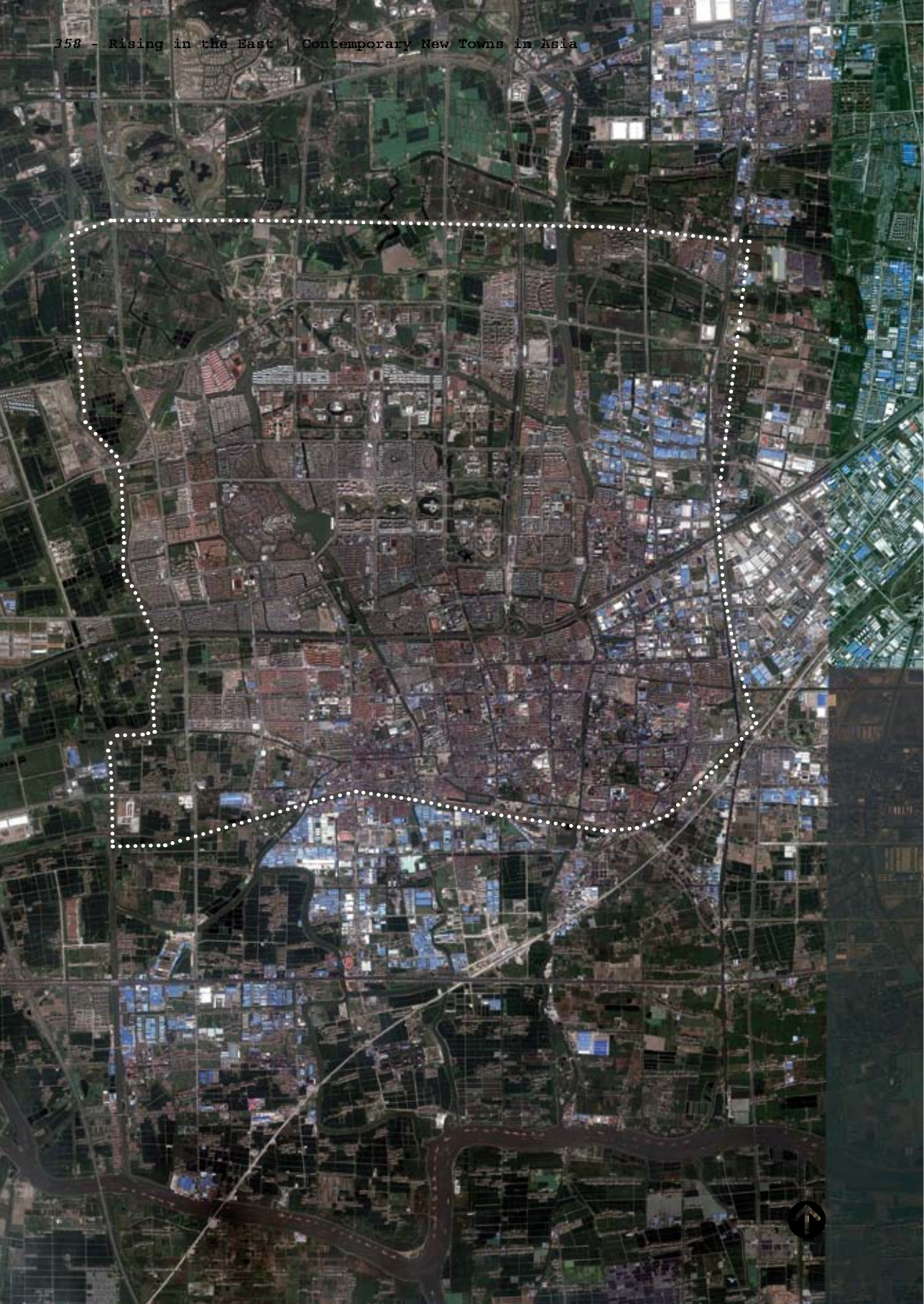
Year Plan in 2004. The previous plans were expanded to 'Three Cities, Seven Towns.' While many of the original New Towns remained, Lingang and Jiading were enlarged to accommodate up to 500,000 inhabitants. This new policy was part of China's national strategy to focus on suburban core development, producing a total of 11 new cities and 22 New Towns within five years.

**590** The media had a field day debating the decision to import foreign vernaculars



The (unused) church is copied precisely from one in Clifton, Bristol. The iconic phone booth is a quirky tribute to Sir Giles Gilbert Scott's famous design, 2010.





- government offices
- commercial & business
- hospital
- education & research
- residential
- industrial
- warehouses
- municipal utilities
- green
- special uses
- water

1km





17th-century Dutch architecture in Gaoqiao New Town (top) and German architecture (designed by Albert Speer & Partner) inspired by Weimar in Anting New Town (bottom), 2010.

when the locals had been under various forms of occupation until the Communist People's Liberation Army took control in 1949. In *The Concrete Dragon*, Thomas J. Campanella provides a new perspective on the choice: "But this can also be interpreted as a claim-laying of sorts, a triumph over history and its humiliations. Such an act could only be undertaken by a society supremely confident in itself and its future, if also somewhat confused about its emergent identity." Campanella, T., *The Concrete Dragon: China's Urban Revolution and What it Means for the World*, Princeton Architectural Press, New York,

colonization, it seemed unfair and ironic to deliberately reproduce foreign archetypes on Chinese land.<sup>590</sup>

Competitions were held for foreign architects to submit designs which reflected their respective national historic styles. Several juries eventually chose ten proposals and construction began across the Shanghai suburbs. Since building began, critics have consistently mocked the decorative quality of the pilot New Towns. The decadent ornamentation and freely interpreted historical designs make ample fodder for critique. But the Western detractors are not alone. When the foreign-themed expansion plan was first approved almost a decade ago, Chinese urban planners, architects, and academics also resisted Mayor Liangyu Chen's pet project. Foreign and Chinese designers presented the same arguments against the foreign copies, claiming that the choices were arbitrary and unrepresentative of their context. Yet against public outcry, the plans moved forward as part of the multi-core regional growth strategy for Greater Shanghai.<sup>591</sup>

The controversial international themes were seen as a way to provide each New Town with an identity in a country where 'socialism with Chinese

characteristics' is experiencing a surge of individualism. Designers are desperate to differentiate themselves, and deliberately ignoring the surrounding context has become a cultural norm.<sup>592</sup> Copying existing buildings (à la the fish and chips shop in Dorset and Christ Church in Bristol) is taken in stride. It is seen as a way to import exotic experiences. In 2006, Paul Rice, chief designer of Thames Town, maintained, "This is not really a question of copying or mimicking. What we are trying to do in Thames Town is set an architectural idiom in a modern context."<sup>593</sup>

The European towns used as models in five of the ten New Towns developed organically over hundreds of years. Their Chinese counterparts hope to amass the same historical richness in less than a decade. But the apparent disregard for local identity makes some designers squirm. Foreign design offices asked to develop these New Towns sometimes find the built results rather embarrassing. In many cases, the projects are

not even listed on the architects' websites. Atkins, however, makes no apologies for its Thames Town design. Their website explains: "While the ethos driving this design would be anathema to some architects, it is demand-driven and its pragmatic originators expect it to attract high-flying academics to teach at Songjiang's seven universities, as well as providing a tourist attraction."<sup>594</sup>

## Urbanization with Chinese characteristics

China's housing and urbanization policies are inevitably tied to the machinations of the Chinese Communist Party (CCP), and Shanghai's 'One City Nine Towns' program is no different. The development plan is largely the invention of Liangyu Chen, Shanghai's former mayor and disgraced CPC Shanghai Committee Secretary.<sup>595</sup> Chen initiated the internationally-themed satellite scheme in January 2001 before turning the project over to the Shanghai Songjiang New Town Developing and Construction Co. Ltd. In 2005, (after massive injections of capital from the national government) Phase I of Songjiang New City was completed on schedule.

But the political reasoning behind Songjiang's development cannot be reduced to the idea that the 'Party boss is always right' nor simplified to the optimistic aphorism 'if we build it they will come.' The deliberate planning and strategizing that marked Songjiang's birth were part of a much larger urban vision. Shanghai's nine New Towns and one new city are just a tiny example of the urbanization taking place (and carefully managed by Beijing) across the country. While the central government still technically owns all of China, Deng Xiaoping's economic reforms included decentralizing management and administration of urban land to their respective municipalities. Municipalities also have the right to lease development rights to that land. This means that the Direct-controlled municipality of Shanghai keeps all the profits of its pilot towns, by leasing land to developers rather than simply selling. It also gives municipalities incentive to develop rural land to attract industry and residents.

Clearly there are many forces driving Shanghai's development strategy. These motivations can be understood as a desire to reduce the great economic disparity between urbanites and farmers, to advance China's New Town planning policies and the 'success' of pilot town projects, and to promote economic development in the historically poor rural areas. The first goal, to reduce the economic and cultural divide between rural and urban dwellers, was seen by many as a long overdue policy shift. In the past three decades, rapid economic growth has been accompanied by an increasing disparity in income levels.<sup>596</sup> In other words, the rich are getting richer while the poor are getting poorer. This escalating inequality is often attributed to residual *hukou* policies differentiating urban and rural dwellers.<sup>597</sup> In order to reduce the bias towards city residents, the *hukou* policy was greatly relaxed in the new satellite towns. In Songjiang, farmers who came to the city as employees were allowed to change their registration status to urban resident if they bought a house. This new status gave

2008, p. 88.

**591** In 2004, Shanghai Municipality announced another important document which adjusted the town system. In this document, the Shanghai municipality suggested that town planning should follow the guidelines of "balanced and integrated development of urban and rural areas" and implement a strategy to promote population concentration in small towns and industry concentration in industrial parks. The main goals were to facilitate the integration of rural and urban areas, suburban urbanization, modernization of agricultural business and the transformation of farmers to city dwellers. The last goal illustrates the unique feature of the rural-urban divide in China caused by *hukou* system, a household registration system which determines the welfare a person entitled to.

**592** When designers are asked to produce ideas for a specific area, they are often presented with maps of the proposed site, surrounded by white space. The message is clearly: it doesn't matter what's next door. The same ambivalence towards context is true of the New Town projects.

**593** Spencer, R., "The Chinese Have Shanghai'd My Pub", *Telegraph*, September 15, 2006. Paul Rice has since left the Shanghai Atkins office, reportedly over disagreements regarding the Thames Town project.

**594** [http://www.atkinsdesign.com/html/projects\\_masterplanning\\_thames.htm](http://www.atkinsdesign.com/html/projects_masterplanning_thames.htm), retrieved on January 7, 2010.

**595** Chen was dismissed from his position as Committee Secretary after corruption charges were brought against him in 2006. Although the charges may be legitimate, there is little doubt that his ideology differed dramatically from the Hu-Wen administration's in Beijing. The charges, and the swiftness of Chen's trial, were likely politically influenced. In 2008, Chen was sentenced to 18 years in prison after being convicted of embezzlement, unceremonious behavior and misuse of official powers. See: Barboza, D. "Former



Party Boss in China Gets 18 Years”, The New York Times, April 12, 2008.

**596** For more on this growing disparity see the Asian Development Bank’s press release from August 9, 2007. <http://www.adb.org/>



The Tudor style is not so unusual in Shanghai as one might think. This converted house from the 1920s in the French Concession area would fit in perfectly in Thames Town, 2010.

[adp.org/media/Articles/2007/12084-chinese-economics-growth/](http://adp.org/media/Articles/2007/12084-chinese-economics-growth/), retrieved on January 22, 2010.

**597** China’s hukou policy, or census registers of household accounts, dates back to the Maoist era. According to Professor Sun Shiwen of Tongji University, Shanghai, the current policy “evolved from a population management system established in the 1950s to meet the demands for control of the Communist Party’s Planned Economy, a system whereby the entire population was divided into two non-interchangeable groups: rural hukou and non-rural hukou (registered ‘citizens’).” The system also prevents those classified as rural hukou from obtaining the same welfare rights and public services that are enjoyed by the non-rural hukou. See: Shiwen, S., “The Institutional and Political Background to Chinese Urbanization,” *Architectural Design*, September/October 2008, p. 24

**598** The socialist danwei system was an urban, political, and social unit organization. Although now ended, the system continues to have an influence

them the same rights as downtown Shanghai inhabitants, including a social security insurance reserved for city dwellers. Rural collective land use rights could also be transferred to the New Town and the involved farmers were promised participation in various aspects of the New Town development. The municipal government also encouraged rural residents to buy houses in New Towns and central towns and promised the government would provide financial subsidies and facilitate commercial loans. Of course these financial incentives were also intended as a attraction mechanism to bring more inhabitants to the New Towns. With the ‘One City Nine Towns’ project, Shanghai’s urban restructuring plan was dependent on the migration of more than one million people.

The second set of motivations concern increasing efficiency and success of the test towns. This stems from the administration’s desire to strengthen the supervision and management of Chinese New Town planning. Historically, pilot towns in rural areas have fallen prey to uninspired design and

anonymous housing blocks. In line with China’s semi-successful strategy of ‘learning from the best’, this meant bringing in foreign expertise to help differentiate the New Towns based on local cultural and historical fabrics, as well as exploiting contextual advantages. This also means improving the management systems and development of New Towns. Because China is facing a future with an unprecedented urban population (an estimated 926 million by 2025) getting New Towns ‘right’ is a major preoccupation. The third motivation for the ‘One City Nine Towns’ project is the government’s intention to promote industrial clustering and economic development on a national scale. The municipality of Shanghai in particular is aiming to facilitate the interface between suburban urbanization and industrialization. Since the introduction of the *danwei* system, many Chinese towns and villages have focused on a unique industry; specialized either in manufacturing, tourism, or port-related industry.<sup>598</sup> Policy and financial incentives were given to each selected pillar industry.

## A growing divide

Chinese economic reforms since 1979 have turned the country away from its agricultural past and increased foreign trade and development.<sup>599</sup> As China began to restructure its economic and development policies in the 1990s, the new focus on industry and technology contributed to China’s wild economic rise. In order to maintain growth, the country now spends an average \$375 billion annually on construction. The People’s Republic is currently using half the world’s cement and one third of the world’s steel. The ostensible reason for this building frenzy is the explosion of the Chinese population. But there is another reason for all the construction.

The \$375 billion works out to about 16% of the Chinese GDP. The more you build, the more your GDP rises. No one wants to be the mayor or premier who has to announce a fall in GDP. This financial incentive keeps the construction industry busy, even while entire neighborhoods sit empty.



The streetscape in Thames Town is a mix of mock-Tudor half-timbering and Chinese shop names. Most of the shops lie empty, and streetlife is largely nonexistent, 2010.

The problem with these numbers is that China has been repeatedly accused of altering its yearly figures. On October 22, 2009, Beijing reported 8.9% growth in GDP for the third quarter of 2009 (as compared to the same quarter in 2008).<sup>600</sup> The official GDP sector percentages for 2009 were agriculture at 10.6% of the total GDP, industry (including construction) making up 46.8%, and services accounting for the remaining 42.6%. The 8.9% growth was questioned by analysts who maintained that such growth was unlikely in the midst of a global fiscal crisis, and argued that China’s economy was too dependent on state spending to be sustainable.

Critics also point to the PRC’s rapid growth, accompanied by increasing disparity in income levels.<sup>601</sup> In other words, the rich are getting richer while the poor are getting poorer. This escalating inequality is exacerbated by the fact that the state government stopped subsidizing welfare housing in 1998. Shanghai adopted the market housing system in 1999, and since 2003 housing prices have risen dramatically.<sup>602</sup> The houses in Songjiang New City sell for a minimum of \$490,000, while larger

today. According to Li Hanlin, “in China the danwei not only provides members of society with economic reward for their work; in addition, through the provision of housing, free medical care, child care

centers, kindergartens, dining halls, bathing houses, service companies, and collective enterprises to employ the children of staff, the danwei provides its members with a complete social guarantee and welfare services.” Li Hanlin quoted in: Bray, D., *Social Space and Governance in Urban China: The Danwei System from Origins to Reform*, Stanford University Press, Stanford, 2005, pp. 4-5.

**599** Serving as the de facto leader of the People’s Republic of China from 1978 to 1990, Deng Xiaoping is widely credited with modernizing Chinese economic and trade policy. Deng’s economic reforms paved the way for current strength of the Chinese economy.

**600** <http://www.businessweek.com/>



globalbiz/blog/eyeonasia/archives/2009/10/chinas\_3rd\_quar.html, retrieved on January 25, 2010.

**601** For more on this growing disparity see the Asian Development Bank's press release from August 9, 2007. <http://www.adb.org/media/Articles/2007/12084-chinese-economics-growth/>, retrieved on January 22, 2010.

**602** In the 10th Five Year Plan, the Shanghai municipal government decided to create a market-oriented social housing supply system mainly for low-income families (known as Lianzu Fang in China). In 2003, the state council issued the Eight Points to ensure healthy and sustainable development of housing market, which was later revised in 2005 to stabilize housing prices. The municipality government



In the poorest parts of old Songjiang, south of the New Town, single-story housing opens towards the road. Shared bathroom facilities are at the end of the street, 2010.

apartments go for \$669,000. In Thames Town, housing prices fall between \$700,000 and \$7,000,000. The gap between average house prices and average income (\$29,000 in 2008 according to the *China Statistical Yearbook 2009*) means that Songjiang New Town is simply "out of reach for many of the lower- and middle-class Shanghai residents whose housing woes these satellite towns were originally intended to address."<sup>603</sup> Many researchers are worried that the income disparity could lead to social instability. As we have seen, this is already happening at the frontline of the urban expansion.

## Culture creates value

Historically, Maoist cities were strictly defined urban cores surrounded by rural areas. The suburban fringe that rings many American or European cities was simply not present in Chinese cities of this period. The meticulous separation is rooted in Maoist policies of *hukou* and reform-era land economics.<sup>604</sup> As Thomas J. Campanella writes, "Chinese cities experienced near-zero growth during the Cultural Revolution, from 1966 until 1976. They remained compact and dense as a result, with an abundance of rural land close by. The transition between city and surrounding countryside was thus sharp and clean."<sup>605</sup>

This organization left room in Shanghai's vast surrounding countryside for the development of entire New Towns, close enough to alleviate pressure on downtown Shanghai, while also providing a solution to the inevitable problems of recent urban sprawl. By creating nine renewed centers, the new districts could operate autonomously while still contributing to Shanghai's status as 'world city'. They would also help maintain Shanghai's development trajectory as a series of clustered towns and cities rather than urban sprawl. Forty kilometers south of downtown Shanghai, Songjiang New City is now home to more than 500,000 residents.

Like the Chinese New Towns from the 20th century, Songjiang is organized by a strict grid, separating the New Town into residential areas in the southern quadrants (bound by the A8 freeway to the South) and university campuses along the northern edge of the city (limited by She Shan National Forest Park and the A9 highway). A central green spine

runs for two kilometers from east to west across the city, beginning at the Thames Town village center, and terminating at the palatial Shanghai No. 1 People's Hospital. The spine is composed of various public parks and bodies of water, providing both a visual and literal connection across the city via the open vista and a single large canal. Another canal encircles the city and connects with the series of inland waterways which provide irrigation and transportation to the surrounding agrarian landscape. The canal structure is overlaid with the street grid, dividing the city into about 80 semi-regular cells.

Although Songjiang New City dates from 2001, Songjiang Old Town (previously known as Huating) dates back thousands of years. During the New Town building spree of the 1950s, the area underwent the typical communist planning of the period, and a large-scale grid was overlaid on the existing town. This mid-century grid provides the basis for Songjiang's growth, and, although presented as a single masterplan, the New City is actually limited to the area north of highway. When the planners laid out the New City, they simply extended the streets north under the A8 Expressway. But Old Town still acts as the social and commercial hub of Songjiang; narrow streets and human-scaled shopping areas attract residents from the New City. There are even 19th century residential areas where elderly Chinese hobble along on mysterious errands, cooking in outdoor kitchens or sitting in tiny courtyards. The labyrinthine streets and two-story buildings make a welcome departure from Songjiang New City's towering residential blocks, though these areas are scheduled for demolition.

The contrast between Old Town and New City could hardly be more exaggerated. Although sometimes lacking in terms of sanitary conditions, the tangled alleys of the *longtang* (or *lilong*) districts provided inhabitants with mass housing on a human scale. As author Michael Sorkin describes it, the *longtang* type is a one- or two-story "row house located along a straight and narrow lane. Initially, these houses kept the layout of traditional courtyard compounds, compressed and deformed to accommodate the party-wall condition, regular geometry, and small site constraints of their urban situation. They nevertheless retained a small entry court and a sense of sequence from the public street through a private gate into a sequestered interior realm, as well as traditional forms of construction, materiality, and style."<sup>606</sup> As the *longtang* typology continued to develop, small changes and adaptations took place. In the years leading up to WWII, the application of foreign architectural styles to *longtang* facades was the latest craze; a precursor of the trend that would see a revival in the early 21st century. "By the time the type had run its course in the 1940s, examples in Spanish, Tudor, Modern, and other styles had proliferated and close to three quarters of the population of the city was housed in some form of *longtang*."<sup>607</sup>

has issued various policies since 2004, which can be categorized into four types: 1) policies intended to reduce or avoid speculation; 2) control second-hand housing transactions; 3) increase housing supply for low income families and 4) create housing construction master plans. Private sector and other intermediate organizations such as banks and insurance companies were mobilized to provide



A model of Songjiang shows the Corbusian style of the city.

housing to low income families. However, the efficacy of these policies remains questionable.

**603** Beech, H., "Ye Olde Shanghai", TIME, February 7, 2005.

**604** Before 1954, the only interaction between urban area and rural area occurred in the marketplace. Government played a major role in protecting the benefits of farmers. Since 1955, China has gradually set up a production system where all secondary industries (including agricultural product processing industries) are located in the urban areas, leaving the rural areas totally dependent on the agricultural economy. Non-agricultural labor was strictly forbidden. The rural area became the material supply base for the urban economy. The interrelations between rural area and urban area were removed by government planning. The strict divide between rural and urban areas was therefore greatly exacerbated during the period between 1949 and 1978.

**605** Campanella, T., *The Concrete Dragon*:





Students arrive by metro to the University area of Songjiang, 2010.





Student housing in the university area, 2010.



China's Urban Revolution and What it Means for the World, Princeton Architectural Press, New York, 2008, p. 191.

**606** Sorkin, M., "Learning from the Hutong of Beijing and the Lilong of Shanghai", *Architectural Record*, July 2008.

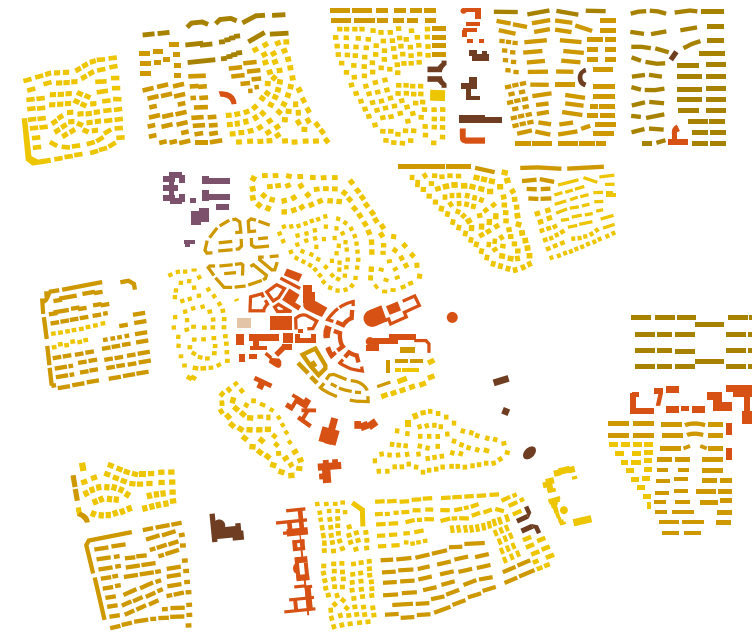
**607** Sorkin goes on to examine the urban function of these longtang at the city scale. "What makes this architecture remarkable, however, is less the character of its individual elements than the way they function urbanistically. Typically, you enter a lilong (a neighborhood of longtang) through a gateway off a major street, then turn left or right onto a lane. From the entry axis, smaller cross axes lead to parallel lanes, creating semi-autonomous neighborhood formations on part or all of their blocks, sometimes connected to adjacent developments. The lanes are almost purely pedestrian and often support an array of retail and other commercial

Because of its planned growth, Songjiang New City is much less dense than the typical Chinese city. The neighborhoods are organized in individual, large-scale urban blocks. Each 500 x 500 m block contains residential high rise towers dedicated to a specific style and unique organization. In one cell every tower has a blue roof and the individual plots collectively form a circle within a square. In another block the apartments are lined up in rows and make a series of neat lines with each home facing directly south.<sup>608</sup>

In another bout of concentration, Songjiang has become the epicenter of all the universities previously scattered around Shanghai. Songjiang University Town (composing the northern half of Songjiang New City) was designed to provide the influx of Chinese university students with updated, expanded campuses. There are seven universities now present in Songjiang—Shanghai International Studies University, Donghua University, Shanghai Institute of Foreign Trade, Shanghai University of Engineering Science, Shanghai Lixin University of Commerce, Shanghai Institute of Visual Art, and East China University of Politics and Law. These campuses are characterized by oversized walkways, grand neoclassical buildings and a weekly migration of students abandoning the city for their hometowns on the weekends. The neatly manicured mega-campus is designed to (eventually) accommodate 100,000 students. The fact that university-related inhabitants make up one third of the city's population contributes to the mass exodus that plagues the city every Friday afternoon. The cluster of academia was meant to jump-start a sort of scholastic metropolis; unfortunately, it seems that the lack of those urban oddities that generally typify a university town (bars, cafes, coffee shops, book stores, clubs, etc.) has driven the students and professors away. The hugely over-scaled size of the academic buildings and roads contributes

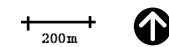
to an almost surreal atmosphere; weekends in Songjiang feel unsettlingly similar to walking on a movie set.

This pervading emptiness is especially acute in Thames Town, where the British design firm Atkins has created a town center that mimics a quaint English village right down to the paving stones.<sup>609</sup> While Thames Town sold out almost immediately, the



Thames Town with surrounding neighborhoods

- high-rise
- mid-rise
- villas
- mixed use
- religious
- cultural
- community



financial success of the real estate project is somewhat tempered by the realization that most of the houses have been bought as investment properties, or by real estate brokers looking to make a quick profit. The result is a neighborhood that is fully sold, but stands nearly empty. In early 2010, representatives from the Bureau of Urban Planning estimated the city was only 30% occupied. Because there is no uniform national welfare or social security system, affluent families buy real estate as investments and as a result real estate speculation has plagued China since the reform era in the late 1980s. Owning a second or third house is becoming standard with the growing Chinese middle and upper classes.

In general, the skyline of Thames Town doesn't rise above four stories. The average urban block holds around 100 separate houses, a markedly less dense configuration than the more typical high-rise housing throughout the rest of the New Town. The residential areas of the Thames Town enclave are totally controlled. Gated communities are surrounded by high fences, imposing gates, video cameras and sullen security guards. The houses themselves—in some cases 400 m<sup>2</sup> villas—are insulated by extra-wide roads and suburban yards. Adding to the ghost town effect is the poor maintenance that stems from the mass of unoccupied

of encounter with one's neighbors in the lanes. Although densely packed, the low scale of the buildings—which face lanes both front and back—permits the penetration of light and air. Of course, the quality of the lilong varies enormously and many—built from the get-go for the poor—were surely wretched places, lacking adequate sanitation, shabbily constructed, and without public amenities, especially green space. But the model is brilliant. Although they are enclaved, they are not forbidding 'gated' communities. In the insane hurly-burly of the city, they are islands of relative calm. And, in the face of the alienation by numbers of the modern metropolis, they create a tractable scale and an extremely rational increment of development, helping to forge the kinds of community interaction that more contemporary high-rise projects (the



default alternative) seldom achieve.” See: Sorkin, M., “Learning from the Hutong of Beijing and the Lilong of Shanghai”, *Architectural Record*, July 2008.

**608** The southern orientation is of historical significance in China. In fact, the fundamentals of housing design can be traced to the Neolithic period. In Chinese residential architecture, the house is organized along a north-south axis and faces south. This orientation springs from ancient geomancy beliefs as well as the functional purposes of admitting the most available sunlight and protecting the interior from prevailing winds. This primary south-facing concept developed over time into the more well known concept of feng-shui. One can also trace the hierarchy of social status to their position within the community. In traditional four-sided courtyard houses (Si He Wu Tian Jiang), the most honored relatives (the oldest) would occupy the spaces at the most southern end of the house. In current housing developments, this social-spatial relationship has been translated to a larger scale.

**609** Although the prevalence of foreign-themed eclecticism has lately been challenged by developments clad in a neo-traditional Chinese style, for about a decade international pastiches dominated the entire country’s suburban landscape. As late as 2003, market research found that “70% of property developments in Beijing at the time emphasized Western geographies and architectural motifs.” *Op. cit.* Campanella, T. p. 210.

**610** Sorkin, M., *Variations on a Theme Park: The New American City and the End of Public Space*, The Noonday Press, New York, 1992.

**611** Wright, H., *Instant Cities*, Black Dog Publishing, London, 2008, p. 78.

**612** Watts, J., “China’s Farmers Cannot Feed Hungry Cities,” *Guardian Unlimited*, August 26, 2004.

**613** The increasing frequency of ‘mass incidents’ may reveal something about

houses. What looks like a cozy English town from afar becomes a series of water-damaged townhouses, poorly maintained yards and peeling front doors. Shoddy construction has hastened this premature old age. The ‘Disneyland effect’, first examined by Michael Sorkin as an American phenomenon in the early 1990s, is not limited to the dubious interpretation of Victorian architecture; it is also present in the stage set quality of the buildings.<sup>610</sup> A closer look at the facade reveals concrete block with applied brick, tile and render finishes.

The purpose of Songjiang was ostensibly to create housing for the masses, and in some ways it has succeeded. Despite the eerily empty Thames Town neighborhood, almost 400,000 people lead productive, presumably happy lives in the forest of towering high-rise apartment blocks. The prohibitive prices of the average apartment does mean that migrant workers who so desperately need housing cannot afford to live in Songjiang. The very rich, on the other hand, appear to live elsewhere and keep the property as a financial asset or holiday home. Students and professors scurry back to their hometowns when the final bells ring on Friday afternoon. The city has, however, found a niche market as a “high-prestige television commercial location. Both Samsung and Volkswagen have shot advertisements there recently, no doubt playing on the connotations of ‘authenticity’ and ‘culture’ that the developers have worked so hard to incorporate.”<sup>611</sup>

## The lifestyle

The skyscrapers that have taken over Shanghai’s housing market in recent decades have all but made the cozy *longtangs* obsolete. Songjiang New City’s sprawling suburban landscape, characterized by super-wide roads, parking lots, and expansive green spaces, is a completely new typology: neither dense urban high rise nor traditional *longtang*. And Songjiang is not alone. As Shanghai attempts to distribute its growing population, more and more New Towns are springing up in areas that were previously farmland.

The effects of this increasing sprawl are the same as those that have increasingly plagued the United States. Huge tracts of agricultural land are eaten up by new housing developments, ultimately forcing China to become a net importer of foodstuffs.<sup>612</sup> This condition will only worsen as more and more peasants flock to the cities, and China faces a future with more city dwellers than it can feed. Increasing car ownership also an effect of the growing middle class, has forced the country to invest in thousands of miles of highway infrastructure. The rocketing economy and zoned separation of work and living spaces (as exemplified by Songjiang) has produced a new country of car owners in a landscape previously dominated by bicycles. Changes in social structures, (in China’s consumer society, the Maoist farmer is no longer seen as the epitome of society) and the massive growth of urban areas means that agrarian land is becoming urbanized at an unprecedented rate. The bulldozers and pavers are moving across the country, eating up farmland and displacing farmers







without censure. State ownership of farmland, one of the key Maoist tenets, means that officials can reclaim land that has been plowed and fertilized by a single family for generations.

Farmers have been protesting this infringement more vocally in recent years.<sup>613</sup> As urban expansion continues, an increasing number of farmers are gathering to renounce the policy, despite their inability to change the law. The peasants face off against riot police armed with shields and truncheons, or local thugs hired by officials to restrain the protesters. This means, in many cases, that the ringleaders are arrested, protesters beaten or imprisoned, and the urbanization continues unfazed. In some cases, more than 10,000 peasants have signed public letters or petitions asking the government to stop the annexation.<sup>614</sup> Each year there are tens of thousands of peasant riots. Most are kept quiet by the police, and listed as 'mass incidents'. Domestic reporting on such clashes is forbidden and foreign reporters attempting to write about the conflicts are often detained or deported. As land disputes such as these become increasingly common, Shanghai may have to reconsider its urbanization policies, if only to quell social unrest.

The new suburban experience produced by the Shanghai New Towns clearly has some unexpected (and unappreciated) side effects for the inhabitants who chose to move there. For most Chinese people, the concept of a daily commute to work is totally unknown. Living so far from the workplace is unusual in a culture where living and working have historically occurred in adjacent areas. The loneliness of suburbia is also a new phenomenon. Chinese suburbanites are now experiencing the 'luxury' of isolation already familiar to many Americans. The house is bigger, the yard is lovely, but the social network inevitably shrinks when each family lays claim to their very own plot of land.

For many Westerners, Songjiang feels like someone gave free reign to romantic nostalgia, but for locals who can afford it, the village-inspired surroundings often make a happy break from the concrete blocks that typically characterize Chinese housing. As Joseph Grima has argued regarding Thames Town, "the community's hopes, desires and aspirations are reflected, or perhaps dictated, by the outermost ten millimeters of the Village's buildings. Its inhabitants become tacit signatories of an unwritten covenant binding them to participate in an ongoing ritual of collective hallucination, defined as The Lifestyle."<sup>615</sup>

### Commuter city

78% of China's energy industry comes from burning coal, and China is almost fully dependent on fossil fuels. The construction industry and huge investments in infrastructure ensure that this dependence will stay strong in the future. Rapidly increasing car ownership also ensures China's dependence on nonrenewable resources. As the economy grows stronger, more and more people buy cars, resulting in massive stress on the existing infrastructure and increasingly toxic air pollution levels. It is

the current tensions between peasants and land-hungry officials. According to libcom.org, a leftwing political site focused on improving social conditions worldwide, the first quarter of 2009 saw 58,000 'mass incidents'. "The figure covers protests which involved 25 or more people. The report said that if this trend continues, then 2009 would break all previous records with over 230,000 'mass incidents', compared to 120,000 in 2008 and 90,000 in 2006." Clearly a growing trend. <http://libcom.org/news/58000-mass-incidents-china-first-quarter-unrest-grows-largest-ever-recorded-06052009>, retrieved on January 27, 2010.

**614** The farmer's arguments are convincingly simple. As Peter Ford reported in 2008: "My ancestors bought this land before the 1949 Communist revolution," says Cheng Zhenhai, a grizzled cotton farmer huddling close to the stove in his dimly lit one-room home, "so I have to keep it. As a peasant, I want nothing else." ...Mr. Cheng was one of more than 10,000 peasants in Shaanxi Province who signed a public letter last month renouncing the collective land-ownership system that has governed China's countryside for the past half century and declaring the land they farm to be their private property. At about the same time, farmers in four other provinces signed similar declarations that appeared on the Internet." In this case, the farmer responsible for circulating the letter around his hometown of Huayin, Chen Sizhong, "was detained in an unheated cell for a month before being charged with 'attempting to overthrow state power,' a crime that carries a maximum sentence of life imprisonment." See: Ford, P. "China's Farmers Protest a Key Mao Tenet", Christian Science Monitor, January 22, 2008. <http://www.csmonitor.com/World/Asia-Pacific/2008/0122/p01s01-woap.html>, retrieved on January 27, 2010. Radio Free Asia ([www.rfa.org](http://www.rfa.org)) also has countless articles with quotes from demonstrators who must remain anonymous for their



own protection, and pictures sent in by villagers using their camera phones to capture the violence. The local media often fails to report such violence, but international human rights organizations are getting more information from the protesters themselves as new technologies allow every bystander to be a reporter.

**615** Grima, J., "New Village = New Town", in: McGetrick, B. (ed), *Work in Progress: Selections from Urban China Magazine* Timezone 8, Hong Kong, 2010.

**616** China recently replaced the United States as the world's worst polluter.

National government challenges this dubious honor, saying that carbon emissions should be measured per head rather than simply comparing the total production of the country. For more on China's increasing climate problems, see <http://www.greenpeace.org/international/news/China-climate-change>.

**617** Hvistendahl, M., "China Eco-Cities Update", [www.worldchanging.com](http://www.worldchanging.com), August

estimated that China is now annually responsible for producing more than 6,200 million tons of CO<sub>2</sub>, making it the world's biggest carbon emitter.<sup>616</sup>

Songjiang New City contributes to this carbon production. Situated 40 km southeast of downtown Shanghai, Songjiang is undoubtedly a commuter city. Many residents of Songjaing travel into the big city for their jobs, while many Shanghai inhabitants shuttle over to the work in the Songjaing industrial areas. Despite the efficient links via metro and rail, China's new class of car owners inevitably chooses driving over public transport. All roads are dimensioned in anticipation of many, many vehicles. And while Songjiang New City claims the sobriquet 'Water-Landscape-Garden City,' in reality there is very little focus on making Songjiang an eco-friendly development. Songjiang is intended to house the middle class in the kind of opulence that goes hand in hand with a new consumer society.

Shanghai's current urban expansion policy reinforces this separation of work and living, and it also contributes to discriminatory land-grabbing. Rural areas are marked for development and then swiftly built up with industry or housing tracts. The farmers are either uncompensated or unfairly compensated, and the current policy is clearly not a sustainable solution. While there are more people to feed, there is less land to produce food, a conundrum that will become exponentially worse if urbanization trends continue at their current pace.

## Chinese authenticity

Songjiang New City is indicative of multiple trends that appear in the current generation of New Towns. While intended to house the masses, it is instead an enclave for the upper class. In an attempt to establish a unique marketing angle for itself, Songjiang claims the somewhat arbitrary identity of a British town. The English facades are intended as a branding tool in a highly competitive real estate market, but this exclusivity means they are unreachable for the middle and lower classes. The city is also riddled with inconsistencies: Songjiang is capable of housing hundreds of thousands of people, yet for various reasons, some neighborhoods within the new city appear to be almost empty. The city exhibits a romantic nostalgia, but it is nostalgia for a past that is not contextually relevant.

Conceived and financed by the government and designed by a foreign office as a 'demand driven' project, Songjiang never really had a chance to fulfill its proposed goals of providing housing to the masses. In fact, there is almost no social housing at all in the new city, (although there are plans to construct some south of the Old Town). In this way, Songjiang can also be seen as the product of China's growing middle class. New wealth has contributed to the same desires that characterized the American Dream in the 1950s. Journalist Mara Hvistendahl describes a video produced by the Shanghai Industrial Investment Corporation as a commercial for a New Town: "The city presented in the video suggested the myriad gated communities that surround Shanghai: gaudy and dramatic, with very little of the restraint and economy that most would associate with sustainable

design. That is precisely the problem in China. People in developed countries have had a few decades to try out and reject excess. It isn't just an awareness of environmental degradation that pushes us to go green; it's a knowledge, gleaned from firsthand experience, that conventional living generates a level of waste that makes us uncomfortable. In urban China, however, bigger is still better. Most middle-class Chinese are still preoccupied with finding ways to display their wealth, not minimize its impact on the world."<sup>617</sup>

One may question whether Songjiang New City represents a sustainable solution for the housing problems that will continue to plague China as its population grows. The suburban scale is simply too sparse and too expensive to accommodate the masses of Chinese workers who require decent housing. By appealing to the upper income levels, Thames Town in particular has done itself a disservice. The result of this pretension is empty streets, characterized by dilapidated houses and superfluous security measures. With no attention to local ecosystems, Songjiang has also cheated itself out of the opportunity to create a symbiosis with the local environment. The new city was the dream of one politician, with all the concurrent weaknesses such a project entails. But despite its kitschy corners and supersized streets, Songjiang may yet achieve its goal. If the academic institutions continue to attract high-level educators and eager students, University City may eventually become a lived-in community. If speculation continues, Songjiang may be destined to become the next Chinese ghost town.

22, 2007. <http://www.worldchanging.com/archives/007153.html>

**618** Lo, C., "Tin Shui Wai Flat from Hell Offered for Rent", *South China Morning*



A gated neighborhood in Thames Town includes (mostly empty) villas and vacation homes.





# Living in Thames Town, Songjiang New City

Interviews, February 2010

## Security Guard, Chelsea Street, Thames Town

**How long have you been working here?**

Two or three years.

**What's the average housing price of these apartments?**

Approximately 15000 ¥ -20000 ¥ per m<sup>2</sup>. [\$2,205-\$2,940 per m<sup>2</sup>]

**Have all these apartments been sold out?**

Of course.

**How many households actually live in these apartments?**

Around 60%.

**Where do most of the households work?**

Most of them work in downtown Shanghai. Some of them work in the new city.

**How do they go to work? Do they all have cars?**

They drive to work. They all own cars.

**What do you think of these households financially?**

**Are they wealthy?**

For me, a security guard and outsider, I think they are super rich.

**What happens to the empty apartments?**

Sometimes they live in downtown Shanghai during work days and come here for weekends or holidays.

**In your opinion, why do they choose to commute between two homes?**

This town is very tranquil. Wealthy people like to live in tranquil places to escape from daily chaos and hustle. Otherwise, they wouldn't drive so far to live here for only two days.

**What happened to those empty shops and stores?**

There are a very limited number of residents here. Those shops and stores can hardly survive. Because of this, a great majority of them moved out.

**What do you think of Thames Town?**

When you first enter the town, you will find the air is so fresh. Everything is so exotic. But if you live for quite a long time, you will find this place is too quiet most of the

time. There are not many people here. It is like an empty town.

**Aren't there more people during weekends and holidays?**

Yes, that's true. But the problem is that most people choose to stay in their home rather than hanging out in this town.

**What about the clubs, tennis courts, and other amenities?**

During weekends, there will be very limited number of people using them. Most of the time, no one uses them.

**Where do these families come from? Are they from downtown Shanghai or from everywhere?**

The residents are from everywhere across the country. There are even foreigners.

**Do you like the town or do you think it has shortcomings in terms of planning?**

I cannot give you a very professional answer. For me, I think the town appears to be a failure since there is such a limited number of people here. It is empty.

## Property Agent

**How long have you been working in this agency?**

Almost two years.

**What's the average price of housing properties in this vicinity?**

Around 10,000 ¥ per m<sup>2</sup>. [\$1470 per m<sup>2</sup>] Depending on the type of house and the location, the price varies drastically. Normally, a decent apartment costs around 10,000 ¥ per m<sup>2</sup>. The price is still rising.

**How do you feel about the new city?**

The new city is now quickly developing. But the transportation is a big problem unless you have a car. The residential areas are too far from the urban centre. Many facilities are still missing, despite the development of the city and the population growth.

**Are there many house buyers? Are they buying the houses for investment or as a fulltime residence?**

There are quite a number of potential buyers. Around 40% of them buy the houses as investment. They already own properties in downtown. But the number of people who choose to live here has been growing since the improvement of transportation facilities, especially the metro line 9. The distance to downtown Shanghai has shortened. And people do not necessarily have to have a car to commute to their work place.

**From your professional perspective, what do you think of Thames Town? Do you like it or do you think it is bizarre?**

I like walking in that town. It is extremely quiet. The air is so fresh. There are many green spaces. And the architectures are so different and unique. However, personally, I think it is a failure. The villas are so expensive. Only the wealthiest people could afford it. There are not many people that actually live inside. It is almost an empty town.

**What do you think of the impact of Songjiang New City development on Shanghai as a whole?**

The most direct impact is on the real estate industry. Initially, the housing price was around 3000 ¥ per m<sup>2</sup> [\$440 per m<sup>2</sup>]. With 200,000 ¥ [\$29,400], you could buy a very decent house. But now, you can buy nothing with that much money.

## Resident in Thames Town (woman, approximately 40 years old)

**Why do you choose to live in Songjiang New City?**

The environment is good. The air is so fresh and clean.

The lifestyle here is relaxing.

**Do you enjoy living here?**

Yes, very much.

**Where do you work?**

I don't work.

**Does your husband work in downtown Shanghai or in Songjiang New City? Does he commute to work? Is that a problem?**

He works in downtown Shanghai. He drives to work everyday. Sometimes he stays in downtown. We have a second house there, but he comes here for weekends and holidays.

**Why did you move here? You don't like the downtown area?**

I don't like the living style in downtown Shanghai. Here there is a better environment. Life here is slow. Not stressful like in downtown Shanghai.

**Do you experience loneliness living here?**

No, I have family here.

**Do you think that Songjiang presents a challenge or opportunity for Shanghai?**

I think it is an opportunity, especially for local economic growth.

**How much does your house in Songjiang cost?**

Around 4000 ¥ per m<sup>2</sup> [\$588 per m<sup>2</sup>]. We bought our house here when it was still farmland. It was cheap at that time.

**How do you feel about Songjiang New City?**

Generally, it is good. But there are not many people

here. Public infrastructures are not fully ready.

**Did you buy your house as an investment?**

It is my third house. Initially it was an investment. But now I prefer living here. I can hardly adapt to the life in downtown now after living here for a few years.

**Do you spend time with your neighbors?**

Yes. We often spend time together. We have tea in the afternoon. We also bake cakes. I learned to appreciate red wines from my neighbors. We even travel together. I enjoy having fun with them. There are many of them who used to study in foreign countries. They are easy to get along with.

**Do you like Thames Town?**

I like the town very much.

## Foreigner from the UK (interviewed outside the gym; female, around 25 years old)

**Where are you from?**

UK.

**Do you have a job here or do you study in the University Town?**

I'm a teacher here, in a language training centre.

**Do you live here as well?**

Yes, I live here.

**Do you live in the new city or the old city?**

I live in the new city.

**Why do you choose to live in the new city?**

The environment here is better.

**Do you spend time with your neighbors?**

No. They cannot speak English.

**Have you ever lived in the downtown Shanghai?**

No, I haven't had the opportunity.

**What do you think of the Thames town?**

Well, for me, I think it is a little bit strange. I mean, it looks like a British town.

## Chinese male (met outside the gym in Thames Town)

**Are you living in Songjiang New City?**

Yes.

**Why do you choose to live in Songjiang New City?**

The environment here is better. The property prices here are more reasonable.

**Do you enjoy living here?**

Yes.



**Where do you work? How do you go to work?**

I work here. I usually drive to work.

**Do you experience more loneliness in Songjiang?**

No, my family live here as well.

**Did you previously live in downtown shanghai? Why did you move?**

I lived in the center of the city for a short period. I don't like the living environment there. Not only the physical environment, but also the social environment: I am not a local Shanghainese. I guess you understand how Shanghainese treat people from other regions. Besides, the lifestyle in downtown was also difficult for me.

**What impact does Songjiang have on Shanghai? Does it help with the housing problem?**

I think, to some degree, Songjiang New City relieved the housing pressure on Shanghai. The real estate sector grew drastically after the development. After the completion of metro line 9, the housing prices skyrocketed and many citizens moved from the downtown area to Songjiang New City. I have some neighbors, they are an old couple, they left their house in the downtown area to their son and relocated to Songjiang New City.

**Did you buy your house as an investment?**

No. I bought it for my own living.

**Do you spend time with your neighbors?**

No. We seldom talk to each other.

**What do you think of Thames Town?**

On a scale of ten, I would rate it as six in terms of planning and development. These villas and apartments are only affordable for the super rich. Even the middle class cannot afford to live here. It's empty.

**Young man, around 30 years old (working in the gym)****Do you live in the Songjiang New City?**

No, I live in the old city.

**Were you born there?**

Yes, I was born in Songjiang.

**Have you witnessed the development of Songjiang New City? What do you think of the development of Songjiang New City, regarding opportunities or problems?**

The new city development is a big opportunity for Shanghai. To a certain degree, it has relieved the housing pressure on the downtown area and stimulated the development of the real estate industry. Most people buy houses here as an investment, not for residential purposes. It is quite rare in Songjiang New City that

there would be any housing project with an actual residential rate higher than 50%. Most of the houses are in the hands of housing brokers. People buy houses here purely as investment. However, in the long run, I am positive that the development of the new city will bring more benefits to the local economy.

**Based on your working experience in Thames Town, can you estimate the residential rate in this area?**

I think it's less than 35% occupied. As you may see already, it is empty. Weekdays are even quieter and emptier.

**Have you ever considered moving to the new city?****Why or why not?**

The housing cost is beyond my ability now. I could barely afford a new house in the new city.

**How do you commute to work?**

I drive to work every day. I have my own car.

**That's a luxury for a young graduate. Why do you need a car? Is that because of the poor public transport in the new city?**

The capacity of the public transport in the new city is still very poor. The bus lines are not properly planned. I need to transfer a few lines to reach my work place from the old city. It costs a lot of time. It is not a problem now to commute to work here. But it causes another problem for me to drive back to the old city. Some roads are two narrow. It's not car-friendly in the old city.

**What do you think of Thames Town?**

Compared with the current situation in Songjiang, I think Thames Town is a waste of government resources. But the long-term effect is hard to predict.

**Well-dressed woman, around 50-60 years old (interviewed outside the supermarket near Songjiang Government District)****Do you live in Songjiang New city?**

Yes.

**Why do you choose to live here?**

I like the living environment here.

**So you enjoy living here?**

Yes, I do.

**Do you work here?**

No, I am retired.

**Does your son work in the new city?**

No. My son works in Jiading. My daughter-in-law works in the new city.

**Do they commute to work? Do they drive?**

My son lives in Jiading on weekdays and come back on weekends, he can catch the shuttle bus from his company. My daughter-in-law works in the new city and drives to work everyday.

**Does your daughter-in-law think public transport is a big problem for her?**

Yes. The public transport services here are very poor. Their capacity cannot meet the demand of the local people. It can be very difficult if you don't have a car.

**Did you previously live in downtown Shanghai?**

No.

**Is this your first house in Shanghai?**

Yes. It's our first house.

**Then it is not for investment?**

It's not, no.

**Do you spend time with your neighbors?**

No. My son and daughter-in-law are very busy. I have just moved from another province to live together with them. I don't have much opportunity to get to know my neighbors.

**When did you buy this house? What was the price at that time and estimated price now?**

I bought it three or four years ago. It was around 5000 ¥ per m<sup>2</sup>. [\$735 per m<sup>2</sup>] Now, it is worth more than 10000 ¥ per m<sup>2</sup>. [\$1470 per m<sup>2</sup>]

**What do you think of Thames Town?**

I like the environment there. It's like a garden. I sometimes take a walk there. It's close to my house.

**Why don't you buy one there?**

It's way too expensive for me. It's almost empty now. Maybe it is a better living environment for retirees, but not for my son and daughter-in-law.

**Why is not suitable for them?**

The amenities are not fully developed there, compared with our current neighborhood. The shops, bars, restaurants, bookstores and many other facilities have moved out from that town.

**Middle-aged lady, around 40 years old (interviewed outside a restaurant)****Do you live in Songjiang New City?**

Yes.

**Why do you choose to live here?**

The environment here is better. The air here is fresher. It's not as crowded as downtown Shanghai. The lifestyle here is more relaxing.

**Do you commute to work? Is that a problem?**

Yes. I have a car, so it is not a problem for me.

**Did you previously live in downtown Shanghai? Why did you move?**

Yes. I lived in downtown Shanghai for several years. The living style is different there. I prefer my current living style. It's more relaxing. The environment here is more livable. A major reason I moved here is that my danwei relocated here.

**Do you experience more loneliness living in Songjiang?**

No. I have many friends here. We hang out a lot.

**Do you spend time with your neighbors?**

No. I seldom talk to my neighbors.

**Do you enjoy living in the new city?**

Yes. I like it a lot.

**Did you buy the house as an investment?**

No. It's my first property in Shanghai.

**What do you think of Thames Town?**

I like the environment there. It is a good place for tourism.

**How about living environment in Thames Town?**

It's too dense there. I don't like it.



# 蛋饼

# 香炸棒棒鸡



01年荣获第二届中国十大名牌食品 01年荣获第二届中国十大名牌食品 01年荣获第二届中国十大名牌食品 01年荣获第二届中国十大名牌食品



炒饭  
炒面

蛋炒饭 4.5元  
火腿炒饭 5元  
鸡肉炒饭 6元  
蛋炒面 4.5元  
火腿炒面 5元  
鸡肉炒面 6元



炒饭炒面

蛋炒饭 4.5元  
火腿炒饭 5元  
鸡肉炒饭 6元  
蛋炒面 4.5元  
火腿炒面 5元  
鸡肉炒面 6元



香炸

薯条 2元/串  
藕片 1元/串  
年糕 1元/串  
牛排 2.5元/串  
牛肉串 2元/串  
羊肉串 2元/串



山东杂粮煎饼

配料: 小米粉 玉米粉  
黄豆粉 小麦粉

饼加脆饼加蛋 2.5元

外卖电话: 13023168348

## 香酥鸡丝

四季

SHIJI

AI JIXIANG BUI

四季

SHIJI

AI JIXIANG BUI

四季

SHIJI

AI JIXIANG BUI



Designer:  
Hong Kong Housing Authority  
(HKHA)

Client:  
Hong Kong government

Developer:  
Tin Shui Wai Developments

Current Population:  
289,800

Date:  
1990-2006

Status:  
Completed

Location:  
22°26'53.11"N, 114°0'16.63"E



Shenzhen  
Bao'an  
International  
Airport

# Tin Shui Wai Hong Kong



Shenzhen

CBD

TIN  
SHUI  
WAI

Sheung Shui  
New Town

Tai Po  
New Town

Yuen Long  
New Town

Tuen Mun  
New Town

New Territories

Sha Tin  
New Town

Tseun Wan  
New Town

Kowloon

Tseung Kwan O  
New Town

Chek Lap  
Kok Airport



Tung Chung  
New Town

CBD

Lantau  
Island

Hong Kong  
Island

South China  
Sea



water



built area



New Town



highway



5km





Besieged City (2008), directed by Lawrence Lau, envisions a brutal, nihilistic future for young residents of Tin Shui Wai.

一群未成熟的孩子 卻要作出抉擇 決定他人的生死  
Their Everyday Routine is Tomorrow's Headlines

# 圍城

BESIEGED CITY

## City of misery

On April 11, 2004, Kam Shuk-ying, 31, was brutally stabbed to death by her 45-year-old husband, Li Pak-Sum, inside their 32 m<sup>2</sup> Tin Shui Wai apartment. Li Pak-Sum then stabbed and killed his twin six-year-old daughters, Lee Yin-li and Lee Tsz-wan. After murdering his family, Pak-Sum fatally stabbed himself. He died two weeks later.<sup>618</sup>

The crime itself was horrific, but what really spooked the residents of Tin Shui Wai (lit. 'Heavenly Water Settlement') was the fact that Kam Shuk-ying had repeatedly sought help from local social workers and police. Days after the murder-suicide, acting police commissioner Gordon Fung Siu-yuen admitted that Shuk-ying visited the Tin Shui Wai police station only hours before being stabbed to death.<sup>619</sup> Shuk-ying and the twins fell victim not only to her violent husband, but also to the failed support network of Tin Shui Wai New Town.

The New Towns that popped up in Hong Kong during the second half of the 20th century are good examples of what is often called 'bedroom communities.' They were designed as cities for living, close to places for employment. Since 1973, Hong Kong has developed nine New Towns.<sup>620</sup> The last of these, Tseung Kwan O, Tin Shui Wai and Tung Chung were constructed after 1990. In the course of their development, during the 1990s, Hong Kong's focus shifted from industry to finance. What resulted were cities of hundreds of thousands who were forced to commute each day via expensive public transit, leaving the residential areas empty and desolate, except for the unemployed. Inevitably, perhaps, this isolation translated into a rising crime rate, an increased reliance on welfare (80% in Tin Shui Wai in 2007), and abnormally high rates of child and spousal abuse.<sup>621</sup>

Since then, Tin Shui Wai has become infamous throughout Hong Kong as a symbol of the failures of New Town planning. Tin Shui Wai is located 25 km northwest of downtown Hong Kong. The New Town is cut off from the urban fabric by a belt of mountainous terrain. At first, many blamed the remote location as a contributing factor to the New Town's social unrest. Isolation, lack of services, limited employment opportunities and a large immigrant population have all contributed to Tin Shui Wai's turmoil.<sup>622</sup> Other critics claim that the New Town's needs have been ignored by government bodies. In 2006, the Director of Social Welfare, Carrie Lam, dubbed the New Town the 'City of Misery' in response to the battery of horrific crimes plaguing the city. Unfortunately, the name stuck.

## Special administrative region

Not counting a short period of Japanese occupation during WWII, the 1842 Treaty of Nanjing ceded Hong Kong to British rule until the official handover to the People's Republic of China in 1997. Hong Kong's years as British colony left their imprint. Hong Kong Special Administrative Region's (SAR) constitution, known as the Hong Kong Basic Law, was praised by the pro-Beijing bloc as being more democratic than the PRC,

Post, April 25, 2004. See also, "Housecall Cops to Ease Pain of Tin Shui Wai", The Standard, May 24, 2010.

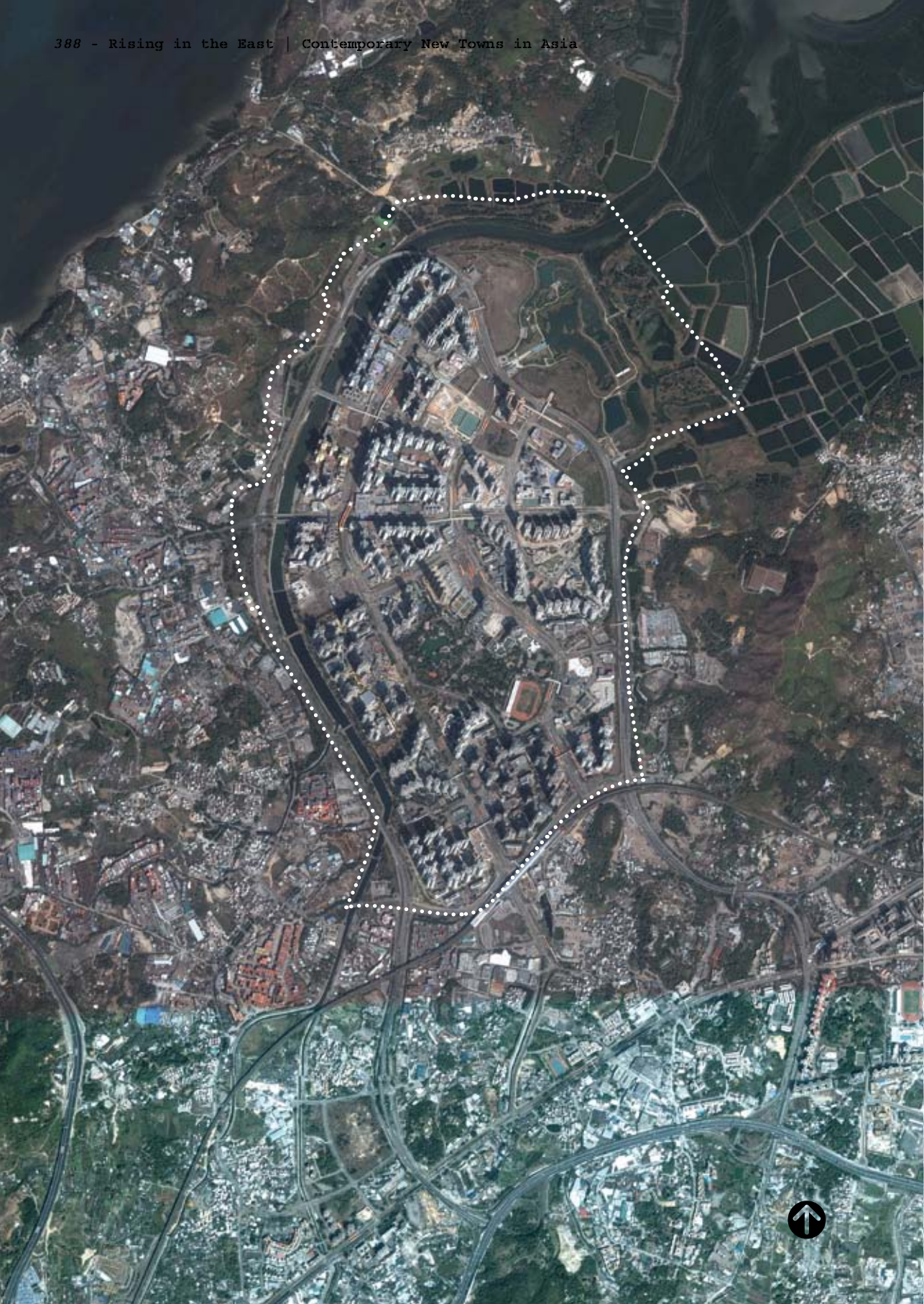
<sup>619</sup> Lee, S. and Sinn, D., "Top officer unswayed by calls for apology; He says the handling of Kam Shuk-ying's case is being probed", South China Morning Post, April 20, 2004.

<sup>620</sup> "Hong Kong has developed nine New Towns since the initiation of its New Town Development Programme in 1973 to cope with the increase in population and to improve the living environment by decentralising the population from the overcrowded urban districts. The target at the commencement of the New Town Development Programme was to provide housing for about 1.8 million people in the first three New Towns, namely, Tsuen Wan, Sha Tin and Tuen Mun. The population of Hong Kong at that time was about 4.2 million. It is now about 7.0 million. The nine New Towns are classified into three generations. The first (Tsuen Wan, Sha Tin and Tuen Mun) started work in the early 1970s; then the second (Tai Po, Fanling/Sheung Shui and Yuen Long) in the late 1970s; and the third (Tseung Kwan O, Tin Shui Wai and Tung Chung) in the 1980s and 1990s. The current population of these nine New Towns is about 3.3 million and is expected to rise to 3.5 million in 2016." See: Hong Kong: The Facts; New Towns and New Major Urban Developments, Information Services Department, Civil Engineering and Development Department, Hong Kong Special Administrative Region Government, February 2009. For more information see the Hong Kong Government website: <http://www.gov.hk>

<sup>621</sup> Chang, D., "Tin Shui Wai: City of Sadness", Asia Sentinel, December 14, 2007.

<sup>622</sup> Many of the immigrants are females from rural mainland China that marry men from Tin Shui Wai. When they come to live in the high-rise New Town, they leave behind any social connections or support networks they may have had. This reality









Looking north, towards the neighborhood called Kingswood Villas, 2010.

may contribute to feelings of alienation.

**623** The government is now made up of a multi-party system with Executive, Legislative and Judicial branches. The Executive branch is led by the Chief Executive, who is elected by an 800-member election committee. The position of Chief Executive was created to replace the Governor of Hong Kong, the highest ranking position during the British colonial period. Donald Tsang has held this office since 2005.

**624** Le Corbusier's *Ville Contemporaine* was a proposed city plan with 24 cruciform

but criticized by the pro-Westerners as not going far enough. Deng Xiaoping's 'one country, two systems' concept allowed Hong Kong to continue operating as a market-based economy, without the socialist controls of mainland China's economic system. This stipulation was put into effect for 50 years, meaning that Hong Kong's economic system may not be changed by the PRC until 2047. Consequently, the SAR enjoys an exceptional degree of liberty.<sup>623</sup> After the signing of the Sino-British Joint Declaration in 1984 it became clear that Hong Kong would only be in British hands until the official handover in 1997. Relaxed immigration laws and Hong Kong's status as a world financial center made the island an attractive destination for mainlanders looking for economic opportunities. Hong Kong's nine New Towns were thus partly a response to the huge influx of migrants from mainland China after the 'one country, two systems' concept took hold.

### 'Heavenly water settlement'

The land that Tin Shui Wai now occupies was used as *gei wai* fish ponds, (traditional tidal shrimp ponds) and rice paddies until 1985. Proximity to the coast and the area's relative flatness made the site ideal for this type of aquaculture. Those same characteristics also made the land attractive to the national government in the late 1980s when they were searching for potential New Town locations.

A wide concrete drainage channel, known as the Tin Shui Wai Nullah, delineates the western edge of the city. Another flank is demarcated by Tin Tsz Road, and the northern edge drops off sharply into the Hong Kong

Wetland Park, a natural reserve. The southern terminus of the city is bounded by the West Rail Line and Tin Shui Wai Station. Because the New Town is so tightly contained, the neighboring areas have remained largely untouched. Tin Shui Wai's 40-story housing towers soar above the surrounding villages and rice paddies like a modern version of Le Corbusier's *Ville Contemporaine*.<sup>624</sup> The tower organization is typical of Hong Kong New Towns. Because flat space is so scarce, housing seven million people means building up instead of out.

Strict zoning and wide streets clearly define thirteen public housing estates, with each estate claiming a block of about 900 m<sup>2</sup>. Within the block, cruciform towers of varying heights gather to form neighborhoods in the sky. Each block is an estate, and each estate has a distinct social identity. Although the cross-shaped footprint is ubiquitous, the towers differ in number, scale, materiality and luxury.

Tin Shui Wai is now home to more than 285,000 residents. The majority (76%) of these residents live in social housing estates developed by the Hong Kong Housing Authority (HA).<sup>625</sup> HA is responsible for thirteen public housing estates in Tin Shui Wai. Each estate holds varying numbers of rental apartments. In Grandeur Terrace, an elegantly named public housing estate constructed in 2003, there are 4,100 rental units. Each unit is between 35 m<sup>2</sup> and 45 m<sup>2</sup>. The population of the estate is 15,300 people, which puts 3.7 household members in each small unit. In an older estate from 1997, Tin Tsz Estate, there are 3,400 flats for 9,400 residents. This translates to an average of 2.7 renters in apartments that range in size from 13 m<sup>2</sup> to 43 m<sup>2</sup>. Each of the properties in the public housing estates is heavily subsidized.

Some of the other flats are shockingly expensive. An apartment in Central Park Towers, smack dab in the center of Tin Shui Wai and one of the most expensive towers, was listed on a local real estate website for HKD 2.58 million (\$330,000).<sup>626</sup> The 60 m<sup>2</sup>, two-bedroom, one-bathroom flat offers a "partial sea view and mountain view".<sup>627</sup> The ever-present cross-footprint is made up of eight flats on each level, with a large central circulation core.<sup>628</sup>

There is also one private housing estate in the city. Kingswood Villas has 58 residential blocks, with over 15,000 housing units. An average two-bedroom apartment is 66 m<sup>2</sup> and costs HKD 1.5 million (\$192,000). The 'villa' tower blocks encircle Tin Shui Wai Park, giving residents a view of the city's green heart. Located at the center of the New Town and surrounded by residential areas, the park provides one of the only recreational spaces in the city. An artificial lake, Tai Chi area, sculpture garden, basketball courts and a children's play area are combined in this centralized leisure area.

Tin Shui Wai is built on 430 hectares and was designed to house 306,400 residents. It is currently home to 285,400 people.<sup>629</sup> Again, like Le Corbusier's design, Tin Shui Wai leaves much of the ground plane free

skyscrapers at its heart. The towers were grouped in a park-like setting, leaving no middle ground between the plane of the earth's surface and the vertical Cartesian towers.

**625** "Housecall Cops to Ease Pain of Tin Shui Wai", *The Standard*, May 24, 2010.

**626** <http://www.squarefoot.com.hk/property/323007>, retrieved on June 21, 2010.

**627** *Ibid.*

**628** <http://www.centadata.com/epaddresssearch1.aspx?type=district17&code=403&info=&code2=&page=0>, retrieved on June 21, 2010.

**629** This creates a density of 664 people per hectare, which will increase to 713 people per hectare when the city reaches its planned capacity. The Tin Shui Wai towers use the same design principles that Le Corbusier put forward in his *Ville Radieuse* design from 1922, and earlier *Ville Contemporaine* proposal: alternating, isolated high rises in a field of open space. Jane Jacobs describes the urban planning establishment's reaction to the *Radiant City* when it was first published: "The Decentrists and other loyal advocates of the Garden City were aghast at Le Corbusier's city of towers in the park, and still are... And yet, ironically, the *Radiant City* comes directly out of the Garden City. Le Corbusier accepted the Garden City's fundamental image, superficially at least, and worked to make it practical for high densities. He described his creation as the Garden City made attainable." Jacobs, Jane. "The Death and Life of Great American Cities", (excerpt) quoted in: Campbell, S. and Fainstein, S. (eds), *Readings in Planning Theory* (2nd edition), Blackwell Publishing, Oxford, 2003.

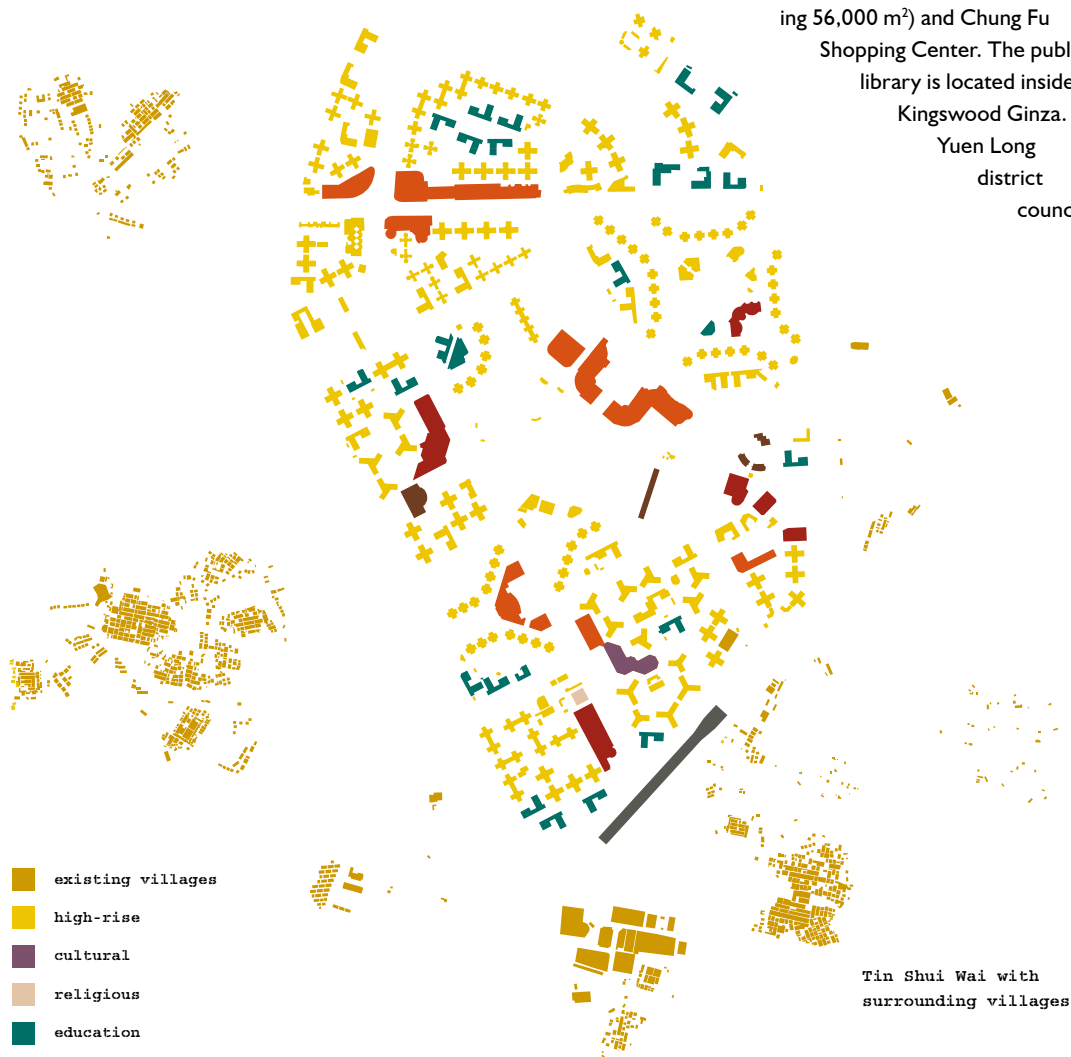
**630** Yung, C. and Ng, J., "Tin Shui Wai's growing underclass", *The Standard*, July



25, 2005.

631 From a police report issued by PPRB at HKT 22:45 hours, Sunday, April 11,

for parks and recreation. Unfortunately, the services one might expect for such a large population are largely absent. In terms of public facilities, other than open green space, Tin Shui Wai has shockingly little to offer. There are only two commercial areas for residents: Kingswood Ginza (a massive shopping complex covering 56,000 m<sup>2</sup>) and Chung Fu Shopping Center. The public library is located inside Kingswood Ginza. Yuen Long district council



Tin Shui Wai with surrounding villages

member Cheung Yin-tung describes the meager amenities in these terms: "Tin Shui Wai's population warranted three public hospitals. It has one public clinic. The nearest public hospital is at Tuen Mun [nine kilometers to the south]. Other facilities are few and far between. 'For instance, eleven housing blocks comprising 4,200 households share one badminton court.'"630

There is only one Mass Transit Railway (MTR) station connecting the New Town to other parts of Hong Kong. At Tin Shui Wai Station, it's possible to transfer to a single light rail loop which circles through the city, stopping every 400 m or so. The MTR station opened in December 2003, thirteen

years after the New Town opened. The public transport facilities are now supported by a series of buses, which provide transport options within the New Town. The lethal concoction of isolation, high density, limited recreation facilities and poorly planned infrastructure has given Tin Shui Wai a pitiable infancy. While the architecture and urban structure cannot be fully blamed for the city's shortcomings, in this New Town they are undoubtedly a contributing factor.

### Notorious New Town

The grisly murder-suicide in April of 2004 at Tin Heng Estate was not the first or last to catch the attention of the Chinese media.<sup>631</sup> The tragedy, already made famous by local news reporters, was retold on the international stage in Ann Hui's 2009 film *Night and Fog*.<sup>632</sup> The movie faithfully follows the details of the horrific events, widely expanding Tin Shui Wai's infamous status. The movie is graphic and disturbing, but its message did not bring an end to Tin Shui Wai's sufferings.

Although the Social Welfare Department established an Integrated Family Service Centre in Tin Shui Wai one year after the much-publicized tragedy, domestic abuse statistics continued to rise.<sup>633</sup> In an effort to establish the underlying factors behind the New Town's unrest, the government also set up a Commission on Poverty in early 2005.<sup>634</sup> The Commission visited the New Town in order "to study, identify and address the special needs and challenges" of the notorious New Town.<sup>635</sup>

But the shocking crimes kept coming. In October 2007, a woman bound the hands and feet of her two children and threw them out of her 24th-floor flat before jumping after them.<sup>636</sup> The woman was a recent immigrant from mainland China, sparking controversy over the difficulties of assimilation in the New Town.

In November 2009, 188 people became members of a Hong Kong-based Facebook page called 'I need to practice killing myself' and pledged to commit mass suicide on December 21, 2009.<sup>637</sup> The group disbanded after Internet police discovered the site. Although the group consisted of people from across Hong Kong, residents of Tin Shui Wai made up a disproportionate percentage of those who were members.

Equally troubling is the unusually high rate of spousal and child abuse that plagues the city. Out of all the New Towns, "Tin Shui Wai leads the way with 3,371 spouse abuses reported last year. It also recorded 93 of the 622 reported cases of child abuse throughout the SAR last year."The abuse cases in Yuen Long district (which includes Tin Shui Wai) ranked top of Hong Kong in 2004," according to Yuen Long Social Welfare Department officer Helen Yu.<sup>638</sup>

2004.

632 Lawrence Lau's film *Besieged City* (2007) has been accused of sensationalizing



Director Ann Hui's *The Way We Are* (2008) paints a gentle portrait of friendship and family life in Tin Shui Wai.



Hui's interpretation of the 2004 murder-suicide lays much of the blame on a lack of police response in her graphic film *Night and Fog* (2009).





請保持清潔  
Please Keep Clean



嚴禁晾曬  
No Hanging Of Laundry



請勿損壞花木  
No Damage Of Plants



請勿進行球類活動  
No Ball Games



請勿攀爬  
No Climbing



請勿喧嘩  
No Shouting

ETYA







the city's woes, but Ann Hui's first docu-drama about the city, *The Way We Are* (2008) cast the New Town in a more favorable light. In *The Way We Are*, Hui illustrates the hard-working everyday life of the majority of this city's population.

**633** Young, C. and Ng, J., "Tin Shui Wai's growing underclass", *The Standard*, July 25, 2005.

**634** See the final report: <http://www.nentnd.gov.hk/eng/fr3.pdf>

**635** From the government press release "Commission on Poverty visits Tin Shui Wai", March 7, 2005. <http://www.info.gov.hk/gia/general/200503/07/03070202.htm>, retrieved on June 18, 2010.

**636** From a police report Issued by PPRB at HKT 12: 39 on Sunday, October 14,



Although the New Town is often criticized for its lack of amenities, there are a surprising number of malls in Tin Shui Wai, including: Tin Chak Shopping Center, Tin Yan Shopping Center, Tin Yeu Plaza, Tin Shing Shopping Center, Chung Fu Plaza, Tin Tsz Shopping Center and Tin Shui Shopping Center.

2007.

**637** "Hong Kong Facebook 'suicide' group investigated", *News.bbc.co.uk*, November 26, 2009.

**638** Op. cit. Yung, C. and Ng, J.

**639** "Housecall Cops to Ease Pain of Tin Shui Wai", *The Standard*, May 24, 2010.

The crimes were so horrific and so numerous that the government was forced to acknowledge certain failures. In May 2010, the local police force put into action a plan to make unannounced housecalls to every family in the city over a period of six months. Each household received a visit from "a station sergeant and two uniformed police officers, together with district councilors and volunteers" to identify "potential cases involving family problems, child negligence or mental patients and single elderly with violent or suicidal tendencies".<sup>639</sup>

Some social workers argue that the high number of recent immigrants contributes to social problems. Kerin Cham, program director for the Tin Shui Wai Integrated Family Services Center, suggests that "residents of Tin Shui Wai north feel alienated and distanced from their friends... They are not able to get assistance because of weak social networks there... Some have asked to move back to their old homes in the city."<sup>640</sup> Many older working-class men choose to marry mainland Chinese women. Due to the complex immigration laws, cross-border families often face many obstacles related to reunification.<sup>641</sup> Once relocated to Hong Kong,

mainland women may face discrimination and difficulties finding work. There are also concurrent factors of social alienation and the difficulties of being far from family and support networks, and housewives often feel the lack of services more acutely than working people. Some sociologists have pointed towards the high numbers of mainland spouses in Tin Shui Wai as a major concern, and argue that funds should be allocated to districts based on demographic factors. Senior social worker Chan Moon-shing says that "much of the domestic violence was because of mainland wives and children joining their families in Hong Kong and not being able to adapt."<sup>642</sup>

Although there are various new strategies being put in place to assuage the social ills of Tin Shui Wai, it will take a combination of government and private initiatives to combat the disturbing trends of the last decade. Most of all, the New Town needs a concerted PR campaign to rebrand the city. Tin Shui Wai has become locked in collective imagination as the 'City of Misery'—without any alternative identity, this nomenclature may prove to be both sobriquet and epithet.

### Where work is not

Strikingly, Tin Shui Wai was consciously planned as a bedroom community. Various 'labour intensive industries' were planned for neighboring regions, but due to the rise of industrial areas in mainland China (Shenzhen, Dongguan and Foshan) the planned work places never materialized.<sup>643</sup> This means jobs are pretty hard to find in Tin Shui Wai: in 2008 around



Every neighborhood includes a playground in the enclosed courtyard, 2010.



Apartment towers form a looming wall around the Tin Shui Wai amphitheater, 2010



85% of the New Town's inhabitants were collecting social welfare.<sup>644</sup> Over the last few years, the unemployment rate in Yuen Long district, (where Tin Shui Wai is located) has been steadily increasing, and is consistently ranked the highest in Hong Kong. In 2001, the unemployment rate for Yuen Long district was 8.4%, compared to the Hong Kong average of 6.9%. In 2005, the Yuen Long rate had risen to 8.5%, while the Hong Kong average dropped to 6.0%.<sup>645</sup>

The average monthly income in Tin Shui Wai is only HKD 8,000 (\$1,000)—little more than half that of the Hong Kong average HKD 15,000 (\$1,900).<sup>646</sup> This disparity is often attributed to the lack of local employment opportunities and the high cost of transportation to other parts of Hong Kong. According to researcher Daniel Sui, “in the absence of a concomitant policy to disperse employment, New Town development in Hong Kong has resulted in a mismatch between place of residence and place of work, leading to a polarization between white-collar jobs concentrated in the older urban areas and blue-collar jobs in the newer towns.”<sup>647</sup>

In striking contrast to the rest of Hong Kong, more than 20% of the New Town's inhabitants “live in poverty”.<sup>648</sup> The percentage reflects both the general lack of employment and the relatively low education levels of many of the mainland immigrants. It also indicates a wide gap between rich and poor. Although Hong Kong has consistently ranked as the ‘freest economy in the world’ for the past sixteen years, wealth distribution within the SAR has been a problem. In June 2010, a minimum wage bill was introduced to combat this disparity, with “implementation forecast for late 2010 or early 2011.”<sup>649</sup> The Home Ownership Scheme (HOS) is one way the national government is combating housing issues. HOS is a public housing program managed by the Hong Kong Housing Authority (HA) and designed to assist residents in buying a home. The HOS supplies subsidies for housing to low-income residents who cannot afford private housing on their own. The subsidies usually cover between 30-40% of housing costs, and roughly 30% of the Hong Kong population currently lives in government-subsidized housing.<sup>650</sup> In Tin Shui Wai, around 80% of the residents live in public housing.<sup>651</sup>

## Deep Bay

Tin Shui Wai sits on 430 hectares of reclaimed land at the edge of the huge Deep Bay wetland complex, a shallow estuary at the mouths of the Sham Chun and Shan Pui Rivers. The extensive wetlands have been managed by the World Wildlife Fund for Nature (WWF) since 1983. A slim green belt stretched along the northwestern edge of the New Town blooms into a conservation area extending into the somewhat smaller Mai Po marshes at the northern periphery.

Because of this proximity to the Deep Bay area, the planners designed a wetland park within the New Town to provide an area for both ecological conservation and recreation. Hong Kong Wetland Park is now a natural

<sup>640</sup> Ibid.

<sup>641</sup> Kuah, K.E., “The split-family phenomenon: a new immigrant family structure”, in: Wang, G. and Wong, J. (eds), *Hong Kong in China: The Challenges of Transition*. Singapore, Time Academic Press, 1999, pp. 203-230.

<sup>642</sup> Op. cit. Yung, C. and Ng, J.

<sup>643</sup> Op. cit. Chang, D.

<sup>644</sup> The welfare system is known as Comprehensive Social Security Assistance (CSSA).

<sup>645</sup> AFP “Hong Kong unemployment rate dips to 4.9 percent”, *Asia One*, January 19, 2010. See also: Census and Statistics Department <http://www.censtatd.gov.hk/home/index.jsp>

<sup>646</sup> Op. cit. Yung, C. and Ng, J.

<sup>647</sup> Sui, D.Z., “Spatial economic impacts of New Town development in Hong Kong: A GIS-based shift-share analysis”, *Socio-Economic Planning Sciences*, Vol. 29, Issue 3, September, 1995, pp. 227-243.

<sup>648</sup> “Tin Shui Wai North worst poverty area 41 per cent of residents poor”, *South China Morning Post*, February 18, 2008

<sup>649</sup> <http://www.heritage.org/index/Country/HongKong>, retrieved on June 22, 2010.

<sup>650</sup> <http://www.housingauthority.gov.hk/en/aboutus/ha/0,,00.html>, retrieved on June 21, 2010.

<sup>651</sup> In an open letter to Hong Kong from November 2007, legislative councillor for the New Territories Chan Wai Yip Albert writes, “There are three basic reasons for Tin Shui Wai to have so many problems. Firstly it is the planning problem. The second is the special population composition, and thirdly, it is related to government policy.” See: <http://www.chanwaiyip.com/page6.php?ip=3>, retrieved on June 21, 2010.

<sup>652</sup> <http://www.wwt.org.uk/our-work/wetland-link-international-wli/wli-site-profiles/>





The separation of automobile, pedestrian and public transport routes creates barriers, limited connections and strictly defined movement routes, 2010.

asia/hong-kong-wetland-park, retrieved on June 22, 2010.

<sup>653</sup> Hui, E. and Lam, M., "A study of commuting patterns of New Town

reserve area that functions as both an education and tourism facility. It also promotes regional biodiversity. "According to the preliminary ecological monitoring programmes... a total of 129 bird species, 32 Odonate species, 55 butterfly species, 9 fish species, 9 amphibian species, 7 reptile species and 5 mammal species have been recorded" at the Hong Kong Wetland Park.<sup>652</sup> The HKWP is adjacent to the the Mai Po Inner Deep Bay Ramsar site, an area that supports more than 120,000 migratory birds each year.

The national government is committed to preserving these wetlands. Bordering the protected areas, Tin Shui Wai itself claims no real commitment to sustainable practice. The efficient housing blocks make little effort reduce energy consumption or limit waste production. After the ghastly social pressures, there is almost no interest left for environmental concerns.

Tin Shui Wai Nullah, the concrete drainage channel that empties into the Deep Bay, clearly illustrates this inattention. The Nullah stretches 27 km and faces pollution issues from local villages and livestock farm run-off. The unfiltered water flowing from the Nullah into Deep Bay has been blamed for polluting the bay and degrading local fish and oyster farms. The filthy water acts as a moat, bounding Tin Shui Wai on its western border.

## Not like the others

Tin Shui Wai brings to light one of the major concerns of urban planners. How much impact does the built environment have on its occupants? In this clean, orderly town with extra-wide streets and sidewalks, there is a disturbing frequency of major crimes. Is there a relationship between architecture and social ills? Or should the blame be shouldered by the social workers and government bodies? And more importantly, what makes Tin Shui Wai so exceptional? Why does this New Town in particular suffer from such a bad reputation when Hong Kong's eight other New Towns look almost identical? Each of Hong Kong's other New Towns has a university, associated industry, or some other specialization that also provides job opportunities close to home. Tin Shui Wai is unique in its lack of employment. Although planners are beginning to look more closely at the city, it will take a great commitment of funds, services and loyalty to the people of Tin Shui Wai to rescue this New Town.

One of the key discrepancies between the *planned* Tin Shui Wai and the existing city is the lack of employment opportunities. The industries that were intended to support local residents never materialized. Coupled with the New Town's relative isolation, this in itself may have been enough to doom the city. According to a report by Habitat International, "despite the idealistic visions embodied in the planning principles of New Towns, the reality fell short of expectations... There are inadequate provision of jobs and schools in New Towns resulting in widespread cross-district commuting between New Towns and old established urban areas. The main reason for this may be due to a functional mismatch where New Towns were planned to be independent but in reality were often forced to operate as satellite and yet dependant towns."<sup>653</sup> Add to that an alienated migrant population with low education, and the chances for success seem to dwindle.

residents in Hong Kong", Habitat International, Vol. 29, Issue 3, September 2005, pp. 421-437.  
<sup>654</sup> Meng, X., Manning, C. and Li, S. (eds), The Great Migration: Rural to Urban



# Bumi Serpong Damai Indonesia



**Current residents:**  
100,000

**Cost:**  
Unknown

**Date:**  
1994 - ongoing

**Status:**  
Under construction

**Location:**  
Serpong District, Tangerang,  
Indonesia

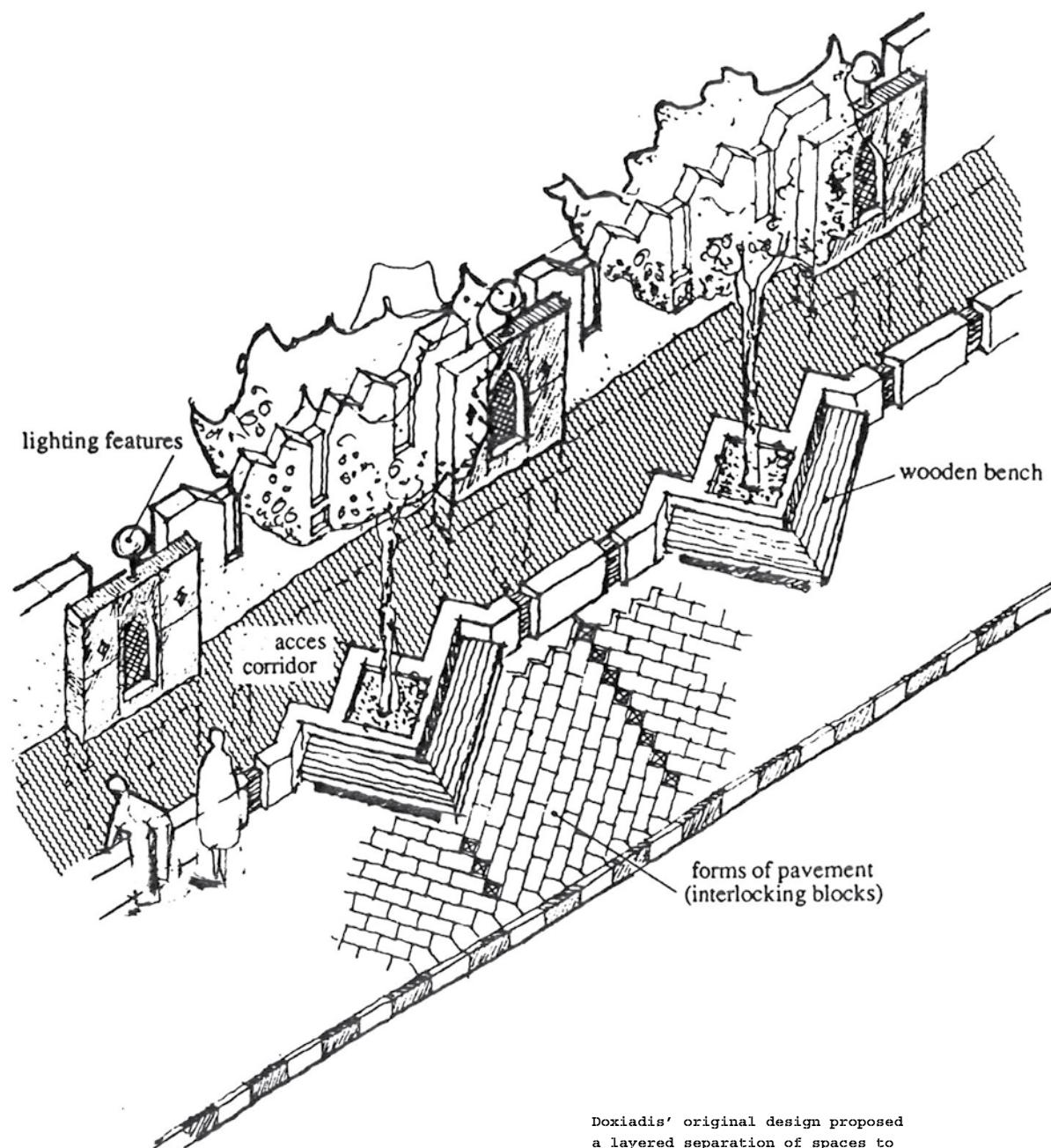
**Developer:**  
Sinarmas Developer and Real  
Estate

**Designers:**  
Doxiadis and Associates, Pacific  
Consultants International, Japan  
City Planning Inc., and Nihon  
Architects Engineers and  
Consultants Inc

**Size:**  
60 km<sup>2</sup>



## visual screening



Doxiadis' original design proposed a layered separation of spaces to create different degrees of privacy, 1996.

## The five pillars

From a developer's perspective, Bumi Serpong Damai—better known as BSD City—is one of the success stories of New Town planning. Busy restaurants, malls and international trade centers are testament to the city's commercial viability. Housing has doubled in value—despite two economic meltdowns. For the past 40 years, Indonesian developers and politicians have marketed an image of the developed west as a model for local planning practice. Middle-class Indonesians, seduced by this narrative of 'modernism' and 'lifestyle', want single-family houses in gated communities. BSD, a product of the top ten Indonesian developers, supplies just that: a low-density haven where 'safety and security' comes first.

At 60 km<sup>2</sup>, BSD City is truly a huge New Town—roughly half the size of Paris. Since only one quarter of this massive area is currently developed, the availability of space presents a definitive advantage—especially in a country where two thirds of the rural labor force is expected to migrate to the city over the next twenty years.<sup>654</sup> Thus BSD's major selling points (marketed as the city's 'Five Pillars') remain in demand: *Size, Accessibility, Facilities, Infrastructure, and Environment* are not likely to go out of fashion any time soon.<sup>655</sup>

The 'Five Pillars' are a way of attracting interest and carving an identity in a market flooded with similar New Town options. Size is an obvious advantage, and BSD's accessibility is equally apparent. Only 40 minutes west of downtown Jakarta via the Jakarta-Merak toll road, BSD is strategically situated for automobile owners. Accessibility is increased by three daily shuttle buses to downtown Jakarta, as well as a commuter train connection. BSD City is also located just 30 minutes from the Soekarno-Hatta International Airport, a key issue for frequent flyers.

In terms of facilities, some of BSD's more stand-out options include a Jack Nicklaus-designed eighteen-hole golf course, tennis courts, Olympic-size swimming pools and Ocean Park, which is a Canadian-designed water adventure park.<sup>656</sup> There is upscale shopping, dining and multiple cinemas. In line with the city's family-friendly approach, there are also 63 national and international schools, including the Swiss-German University, Deutsche Internationale Schule and Sinarmas World School.

Infrastructure is one of the new city's most appealing assets. Limited public transport options and long commutes make cars the primary means of transportation in most Jakarta Metropolitan Region (JMR) New Towns, and BSD is no different. The toll road developed in tandem with BSD was approached as one way of reducing the resulting traffic congestion. For this new city, infrastructure development and expansion have coincided with population growth. A modern four-lane road system runs throughout the city, connecting it to the toll road. BSD City is also powered by a reliable energy supply and network-readiness is ensured by integrated fiber optic cables. Drains and canals are part of the New Town's flood management infrastructure.

Migration in China and Indonesia. Edward Elgar Publishing Ltd., Cheltenham, 2010, p. 3.

**655** [http://www.bsdcity.com/thecity\\_5\\_pillar.aspx](http://www.bsdcity.com/thecity_5_pillar.aspx), retrieved on January 3, 2011.

**656** A Saturday morning round of golf will run you Rp 1,158,000. See: [http://www.bsdcity.com/thecity\\_5\\_pillar.aspx](http://www.bsdcity.com/thecity_5_pillar.aspx), retrieved on October 15, 2010.

**657** "BSDCity: Big City. Big Opportunity", Sinarmas Development and Real Estate





- water
- golf
- administrative centre
- education / university
- green space & park
- low-rise residential
- planned residential
- community
- nature reserve
- industry
- existing communities
- office
- mixed use
- other
- intermodal station
- hotel

1km



[brochure], 2010, p. 6.

**658** Firman, T., “New Town Development in Jakarta Metropolitan Region: a Perspective of Spatial Segregation”, *Habitat International*, 28, 2004, p. 354.

**659** To name just a few of these upscale developments: Bintaro Jaya, Pondok Indah, Citra Garden, Kota Wisata, Kota Bunga, Kota Cibubur, Kota Jababeka, Modernland, Citraland, Pantai Mutiara, Pluit, Kelapa Gading, Lippo Karawaci, Alam Sutera, Sentul City and many others.

**660** Op. cit. Firman, T. p.351.

**661** One exclusive New Town, Royal Sentul City, boasts a recreational park, a



The former rubber plantation and factory where BSD stands today, ca. 1930s.

spa, an eighteen-hole golf course, polo and equestrian areas, a business park, a trade center, a scent garden, a shopping mall and multiple hospitals. Royal Sentul City was designed by the American architecture firm Kalges Carter Vail and Partner, with housing that reflects classical European, Mediterranean and Japanese styles.

The city’s focus on environment, however, is limited to a fairly narrow understanding of the term. Maintenance of the extensive green spaces, and commitment to securing the perimeter make up the extent of BSD’s environmental commitment. According to the city’s website, “Security and safety are vital for peace of mind. An electronic security apparatus is supported by professional and friendly security guards throughout BSD.”<sup>657</sup> All of these aspects make BSD especially attractive to local consumers.

## Indonesian New Town planning

New town planning in Jakarta dates back to the early 1800s. During the 19th century, the Dutch colonial government planned and built the famous Weltevreden and various Meester Cornelis New Towns in and around Batavia (now the city of Jakarta) “using a new settlement pattern with airy large estates, which were quite distinct from the congested setting of the old town.”<sup>658</sup> These loosely gathered villas set amidst extensive green (public and private) space set the precedent for later Indonesian New Town building.

After independence in 1945, the new government planned and constructed Kebayoran Baru, a New Town on the southern outskirts of the city. In the early 1970s, private developers became involved for the first time. One of these early privately developed New Towns was Pondok Indah (‘beautiful home’), also on the southern edge of Jakarta, and only ten minutes away from the rubber plantation that would eventually become BSD City. By 1997, there were more than 50 New Towns scattered around the JMR.<sup>659</sup> Professor Tommy Firman of the Bandung Institute of Technology suggests that there are three main objectives for New Town developers in the JMR: “first, to fulfill people’s desire for living in a quiet, modern and secure environment; second, to give them investment opportunities; and third, to get huge and quick monetary profits.”<sup>660</sup>

As a result of these powerful motivations, privately developed New Towns have become a basic component of urban planning in Indonesia. Most of the contemporary New Towns around the JMR are characterized by single-family homes, arranged loosely along curving cul-de-sacs with a guard at the main entrance gate. Comparisons to Western

gated communities come easily, due to the extensive security measures in place. These towns provide walled enclosures to ‘protect’ their residents from the outside world, much in the same way the Enclave Cities isolate economic groups. They are populated by wealthy young families who value security and a community of their peers. Marketing brochures advertise golf courses and spas, malls and international schools.<sup>661</sup> The changing consumer patterns within Indonesian New Towns are paralleled by a shifting family structure. According to Dr. Harald Leisch, Director of

International Affairs at the German Research Foundation, the majority of buyers in the JMR New Towns are young couples with up to two children. “Usually, they live as a core family and not with grandparents or aunts and uncles like in the traditional Indonesian society.”<sup>662</sup>

Pondok Indah is the original prototype, and in the 40 years since its development, this New Town has become the Beverly Hills of Jakarta—its name is now synonymous with affluence and high social status.<sup>663</sup> In addition to its connotations of prosperity, Pondok Indah is a direct precedent for BSD City in other ways. According to an estimate in the *Jakarta Post*, 74.5% of Pondok Indah residents are expats; numbers that correspond to BSD City’s own large expat community.<sup>664</sup> The New Towns’ origins are also similar: Pondok Indah was developed by a consortium led by the Ciputra Group—the same developer who is responsible for BSD City.<sup>665</sup>

Since the 1970s, JMR New Towns have been developed primarily by the private sector. They are often constructed underhandedly, on land bought by well-connected developers at rates much lower than market value. In many cases, government regulations are ignored, neglected, or loosely interpreted because they clash with market forces. City Hall’s involvement has continued to shrink over the past four decades, and current urban development management is now controlled and executed almost exclusively by private developers. In a recent article in the *Jakarta Post*, urban planning Professor Tommy Firman writes, “If we look at the trend more closely, it seems that major urban development projects in Indonesia are largely market driven and are carried out without clear shared visions. The government can make beautiful plans, on paper. Nevertheless, in many cases it is the private sector that decides whether the plans are realized.”<sup>666</sup>

These private developers market their New Towns as a symbol of modernism—or as Professor Eric Heikkila describes it, “the ‘good life’ of the developed West.”<sup>667</sup> Their strategy in selling this vignette of a modern Indonesian lifestyle has been startlingly effective. Many Indonesians now associate the local vernacular style with past eras, and prefer instead to live in houses reminiscent of what they see on television.<sup>668</sup> This image of a cutting-edge, urban Indonesia can be traced back to President Suharto’s New Order policies in the 1960s.<sup>669</sup> According to authors Trevor Hogan and Christopher Houston, Suharto’s administration promoted “exclusive dream housing estates and shopping malls. The emphasis was and continues to be on linking these new urban spaces and segregating their subjects from the streets and *kampungs* of the urban poor. The new middle classes learn to perceive the poor and their living spaces as a danger to both their own hopes and the development of the nation-state.”<sup>670</sup> Underlying tensions between ethnic groups exacerbate this polarization.<sup>671</sup> As a result, Professor Firman claims these practices have frightened “middle and upper income groups of JMR residents, resulting in several pockets of exclusive residential areas and New Towns in which the residents enjoyed an exclusive lifestyle, with high security and much better infrastructure and facilities.”<sup>672</sup>

Traditional Indonesian is not an option.

**662** Leisch, H., “Structures and Functions of Private New Towns in Jabotabek”, in: Nas, P.J.M. (ed), *The Indonesian New Town Revisited*. Lit Verlag, Germany, 2002, p. 94.

**663** Winarso, H., “Urban Dualism in the Jakarta Metropolitan Area”, in: Sorenson, A. and Okata, J. (eds), *Megacities: Urban Form, Governance and Sustainability*, Springer, Tokyo, 2011, p. 178.

**664** BSD also has a very high percentage of ethnically Chinese Indonesians. For these residents, safety is a real factor.

In recent years, Chinese have been disproportionately targeted in recent bouts of violence and terrorism. See: *Jakarta Post*, Issue 6, Edition 21, January 6, 2007.

**665** The Ciputra Group is led by Ir. Ciputra, one of the leading real estate developers in Indonesia. “In 1970 Ciputra combined with other leading firms, including the principals of the Salim Group to form the Metropolitan consortium to develop Pondok Indah, a 500 ha prestige housing estate with golf course and other facilities... In 1984 he led another consortium to develop the 2,500 ha Bumi Serpong Damai New Town.” Rimmer, P. and Dick, H., *The City in Southeast Asia: Patterns, Processes and Policy*, National University of Singapore (NUS) Press, Singapore, 2009, p. 220.

**666** Firman, T. and Hudalah, D., “Urban Development: What to do and what can we expect?”, *Jakarta Post*, December 20, 2010.

**667** Cowherd, R. and Heikkila, E., “Orange County, Java: Hybridity, Social Dualism and an Imagined West”, in: Heikkila, E. and Pizarro, R. (eds), *Southern California and the World*, Praeger Publishers, Westport, 2002, p. 202.

**668** Heikkila also quotes Ciputra as saying that “99% of real estate is sold to locals who are not interested in Indonesian styles.” Op. cit. Heikkila, E. and Pizarro, R., p. 202.

**669** Indonesia was one of the hardest hit during the late 1990s Asian financial crisis. Increasing economic fears, coupled with



more vocal calls for democratic reform, contributed to Suharto's resignation in 1998. The nation's first direct presidential election was in 2004.



The suburban, upper-class housing in BSD City provides a clear alternative for wealthy buyers looking to escape the chaos of Jakarta, 2011.

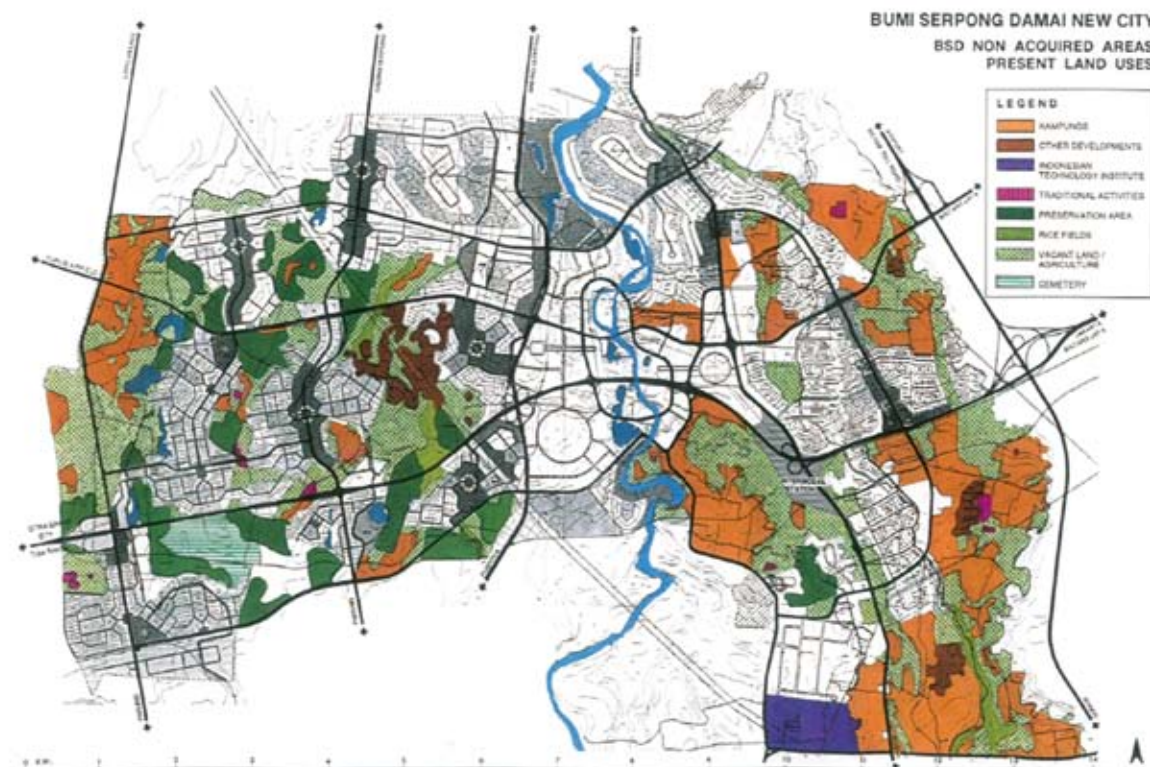
**670** Hogan, T. and Houston, C., "Corporate Cities: Urban Gateways or Gated Communities Against the City? The Case of Lippo, Jakarta", in: Bunnell, T., Drummond, L. and Chong, H.K. (eds), *Critical Reflections on Cities in Southeast Asia*, Brill Academic Publishers, Tokyo, 2002, p. 256.

**671** In Indonesia, the upper classes are disproportionately of Chinese extraction, and this has led to various bouts of ethnic tensions. The racially-motivated riots in 1998 left many Chinese shop owners with destroyed property. Some regional observers cite New Order policies as

### 'The good life starts now'

BSD City was initiated by a cartel of ten well-known Indonesian developers. Their so-called Metropolitan Consortium was led by Indonesian real estate mogul Ciputra—renowned in some circles as the Donald Trump of Jakarta, and famous enough to be known by just one name. The consortium established the PT Bumi Serpong Damai Tbk (PT BSD) company in 1984 to manage the development as a subsidiary of the Ciputra Group.<sup>673</sup> PT BSD then hired Pacific Consultants International, Japan City Planning Inc., Nihon Architects Engineers and Consultants Inc., and Doxiadis Associates to plan the New Town. Doxiadis Associates' involvement spanned from 1994 until 1997, and focused on infrastructure, masterplanning and more detailed planning of the CBD. In 1994, PT BSD commissioned Doxiadis and Associates S.A. (in collaboration with John Portman and Associates and PT Encona Engineering) to design the Revised Master Plan of Bumi Serpong Damai New City.<sup>674</sup> Two years later, Doxiadis Associates produced a Final Report on the project. The Report concluded, "The concept of a new city in BSD is considered as a pioneering idea in private new area development in Indonesia and opens new horizons of a modern way of thinking over human settlement science... As a self-sustained city, BSD shall ultimately receive and serve in an ideal manner more than half a million inhabitants, offering simultaneously realistic possibilities for a vast spectrum of job opportunities and private investment."<sup>675</sup>

That prognosis appears to have been fairly accurate. Unlike some of the other case studies we've followed, BSD City has experienced a slow and steady expansion since breaking ground in 1991. The New Town was originally planned to house 600,000 people by 2005 on about 6,000 hectares. But due to BSD's slow growth pattern, as late as 2004 only 1,466 residential units had been built. By 2010, the population had grown to roughly 100,000 and yet three-quarters of the total area remains in its original state, awaiting bulldozers. There are plans to construct another 150,000 houses before 2020, and the developer's ambitious target population is one million inhabitants.<sup>676</sup> BSD City's continuing development has also helped boost real estate prices—a major feat in the face of two global economic downturns. In 1997, just before the Asian financial crisis, a 36 m<sup>2</sup> house on a 72 m<sup>2</sup> plot sold for IDR 53 million (\$5,300 at 1997 exchange rates). In 2004, the same type of house was offered for IDR 114 million (\$11,400 at 2004 exchange rates)— a price that reflects an increase of more than 115% market value in just seven years.<sup>677</sup>



BSD City masterplan by Doxiadis and Associates, with existing kampungs shown in orange, 1996.

This process of constant renewal and growth has helped the New Town garner a variety of design awards, including a *Realestat Indonesia* award for best design, the Pioneer Best New Township award in 2004, and a No. 1 ranking in *Golf Digest's* list of top Indonesian courses.<sup>678</sup> BSD City is also the winner of several international awards, including one for environment-friendly property and The Golden Project Award, given in recognition of various aspects of the development such as consistency, composition and something described as 'the quality of occupancy.'<sup>679</sup>



Planned communities (including BSD City) within the Jakarta Metropolitan Region, 1996.

### 'A city so great'

The masterplan designed by Doxiadis Associates and John Portman & Associates is roughly shaped like an upside-down letter 'U'. The central axis is occupied by the riverfront Central Business District. Flanking the CBD on the east side, a large golf course covers both banks of the meandering Cisadane River. The majority of housing is low rise, single-family homes. Indigenous communities (*kampungs*) are built into the urban fabric, enveloped by the newer construction.

a contributing factor to the continued socio-economic and cultural tensions. See: Wilson, C., "Internal Conflict in Indonesia: Causes, Symptoms and Sustainable Resolution", Parliament of Australia Research Paper, August 7, 2001.

**672** Firman, T. "New Town Development in Jakarta Metropolitan Region: a





A newer map for BSD City by the current developers shows remnants of the Doxiadis plan, though much of the plan has been discarded, 2010.

Perspective of Spatial Segregation”, *Habitat International*, 28, 2004, p. 360

**673** PT BSD Tbk continues to manage the project today—although the company was acquired by the Sinar Mas Group in 2002. PT BSD Tbk is also responsible for developing the Serpong-Jakarta toll-road, a 13 km long road linking BSD City with downtown Jakarta.

**674** Bumi Serpong Damai New City Final Master Plan Report. Doxiadis Associates, John Portman & Associates, PT Encona Engineering Inc., March 1996, p. 1.

**675** Ibid.

**676** With almost ten million inhabitants, Jakarta is the twelfth largest city in the world. Even if BSD City reaches one million, it will still be dwarfed by its mother city. See: “BSDCity: Big City. Big Opportunity”, *Sinarmas Development and Real Estate* [brochure], 2010, p. 11.

**677** Winarso, H., “Urban Dualism in the Jakarta Metropolitan Area”, in: Sorenson, A. and Okata, J. (eds), *Megacities: Urban Form, Governance and Sustainability*,

In the built version, the New Town deviates slightly from the masterplan. The CBD is moved to the west, at the intersection of two main arteries. Institutional and educational facilities lie just to the west of the CBD, on the edge of the developed land. To the east, commercial and office buildings flank the riverside. Across the Cisedane to the north, Damai Indah Golf course follows the curving path of the water, while more commercial, office and medical facilities lie just to the east in a second, smaller CBD. The main bus terminal and taxi stands are south of this second CBD, along the BSD-Indah toll road. The rest of the city is largely residential, with religious buildings, schools, public parks and recreational amenities built into the design at regular intervals.

Unlike some other developments in the JMR, a great variety of both housing types and sizes was actually planned into the design.<sup>680</sup> In the Doxiadis masterplan, high-income, middle-income and low-income neighborhoods were differentiated at an urban scale solely by plot size—organization and layout were otherwise indistinguishable. The high-income plots averaged 600 m<sup>2</sup>, middle-income plots were around 240 m<sup>2</sup> and low-income single-family houses occupied plots of about 60 m<sup>2</sup>. High- and middle-income neighborhoods were identical: a school, open space, and a mosque, occupied the center of each neighborhood, while two mid-rise housing blocks and two commercial buildings symmetrically flanked a main access road. Single-family houses filled the rest of the site in small groupings accessed by cul-de-sacs. In the low-income neighborhood the mid-rise housing was dismissed, the single exception to an otherwise

perfect copy. This neighborhood-based organization is a hallmark of mid-20th century New Town design, and testament to the Doxiadis office’s expertise in New Town planning.<sup>681</sup>

Within the New Town, three income levels (high, middle, low) are assigned to sixteen corresponding sectors. Low-income sectors are placed along the southern periphery of the city, middle income sectors form a sort of buffer zone in the more central areas, while high-income sectors occupy the northern edge of the city, closest to downtown Jakarta. BSD City currently has fourteen inhabited residential areas, all of which are individually gated communities. These include: The Green, Green Cove, Virginia Lagoon, De Latinos, Foresta, Neo Catalonia, The Castilla, Sevilla, de Park, The Icon, Virginia Minimalist, Taman Tirta Golf, Provence Parkland, Vermont and Pavilion Residence. Perhaps tellingly, three of the neighborhood names reference Spain, while three others conjure American associations, giving buyers a sense of internationalism.



Although Doxiadis and Associates provided plans for neighborhoods with traditional amenities (schools, mosques and community centers), very few BSD City neighborhoods actually incorporate this program, 1996.

The neighborhoods are further broken down into residential sub-clusters. For example, ‘Foresta’ is organized into ten sub-clusters. Located in the geographical center of the city, Foresta offers “modern minimalist, art deco or classic styles—a superb selection of living and pleasure facilities including jogging tracks, fitness centers, a common park and swimming pools in every club house as well as lake and river views.”<sup>682</sup> A rendering

Springer, Tokyo, 2011, p. 178.

**678** Ciputra, who led the BSD City development team, is also Chief Executive and founder of Realestat Indonesia.

**679** In 2000, BSD City also received ISO 9001 accreditation. For more information on these awards see BSD’s website: <http://www.bsdcity.com/> and the article “BSD wins Environmentally Friendly Property Award”, *Jakarta Post*, May 22, 2009.

**680** In 1996, a 50 m<sup>2</sup> house on a 120 m<sup>2</sup> plot could at IDR 74 million (\$2.1 million at 1996 exchange rates). At the other end of the spectrum, a 257 m<sup>2</sup> house on a 431 m<sup>2</sup> plot could run up to IDR 443 million (\$12.4 million at 1996 exchange rates). See: Bumi

Serpong Damai New City Final Master Plan Report. Doxiadis Associates, John Portman & Associates, PT Encona Engineering Inc., March 1996, p. 17.

**681** The Doxiadis office carries a great legacy in New Town planning, spawning









Doxiadis' proposal for three neighborhood plans at varying levels of income used decreasing plot size to accommodate more inhabitants in the low-income areas, however, this design has since been abandoned in favor of a low-density, luxury housing strategy, 2010.

from their experience with New Town construction throughout the Middle East and Africa during the 20th century. They have continued the practice of New Town planning, and the office is currently designing a masterplan for DHA City in Pakistan, as well as a development plan for Amman.

**682** [http://www.bsdcity.com/product\\_detail.aspx?id=3](http://www.bsdcity.com/product_detail.aspx?id=3), retrieved on November 15, 2010.

**683** Author Solvay Gerke argues that the emerging Indonesian middle class has been striving for a "consumption-oriented lifestyle, with new models of leisure that included shopping, sports, travel and watching Western movies" since before the 1997 crisis. According to Gerke, "consumption of mass-produced goods and the promotion of lifestyles of leisure have become their defining characteristics in Indonesia." See: Gerke, S., "Global Lifestyles under Local Conditions: the New Indonesian Middle Class", in: Beng-Huat,

of one of the available housing styles ('Type 79') shows a smiling, blond family of four standing in their driveway beside a shiny new car.

Marketing images for 'The Green' depict a park-like setting at sunset, just as the sky turns a deep dramatic blue and the nostalgic-looking street-lamps switch on. A man jogs by a pair of strolling lovers, while two girls sit in the grass along a small waterway. White birds float on the clear water. Behind the girls, a man motions to his young child, and two women chat on a covered bench. Combined, the images suggest a lifestyle of prosperity and tranquility that has been marketed to middle-class Indonesians since the early 1990s.<sup>683</sup> BSD City's 'family-friendly' focus and heavy security features are both part of this strategy to appeal to the upwardly mobile.

Architecturally, BSD City's design imagery is non-specific, without any reference whatsoever to either indigenous (*pribumi*) or Islamic styles. Instead, the architectural style could be classified as modern or 'contemporary' design, characterized by flat roofscapes, large blocks of color, stuccoed concrete walls, rectilinear lines and quadrilateral voids. There is no coherent attempt to reinterpret either foreign or local vernaculars. The absence of Islamic design elements is provocative in the world's largest Muslim country.<sup>684</sup> In fact, BSD is hardly singular in this aspect; all the JMR New Towns are known for this type of design. As author Eric John Heikkila puts it, "there is an oppressive uniformity of house plans,

site planning, parcel division, street layout, and subdivision planning exhibited across the Jabotabek real estate industry... As such, Indonesia's 'Mediterranean' style developments are not directly inspired by anything found in Europe. Instead, what is imagined to be the 'good life' of the developed West comes to Jabotabek via Orange County."<sup>685</sup> Gordon

C. (ed), *Consumption in Asia: Lifestyles and Identities*, Routledge, London, 2000, p.136.

**684** According to the 2000 census, 86.1% of the 240 million Indonesians are Muslim. Results of the 2010 census are expected



The park-like, suburban character of BSD City (as shown in this image from Sinarmas Developer and Real Estate), is a major selling point for wealthy residents, 2010.

Benton, an architect and Town Manager of Lippo Karawaci New Town defends this free interpretation by pointing to market forces. "Today, clients want to be international, because of their extensive travels to Europe and the US. They are also highly influenced by television. They aren't too keen on ethnic architecture... They want Mediterranean style, Los Angeles style and Beverly Hills style. Our marketing people have been successful in identifying the market and we are very sure of what they want."<sup>686</sup>

In 'The Icon', a neighborhood located just west of the Cisedane on the southern edge of the city, 'what they want' is shockingly uniform. The Icon's three sub-clusters surround a 4.5 ha circular core: 'Eternity', 'Cosmo' and 'Simplicity' offer residents various choices in terms of plot and house size, as well as cosmetic design alternatives. In Eternity, for example, housing type 153 comes in both A and B styles. The floorplan and gable roof are the same in both types, but the facade in 153-A is slightly more open than that of 153-B. Although both facades are materialized in what appears to be light stone on the ground floor and stucco on the top half, type 153-A has a large front window above the main entrance that rounds a corner, while 153-B has a smaller rectilinear window facing the street. 153-A also has a support post under the main entrance's cantilevered overhang, while 153-B does not. 153-A also has a long ribbon window in the upstairs bathroom overlooking the street, while 153-B has a smaller, vertical opening. The floor plan is the same for both options,

to be similar. See: <http://dds.bps.go.id/eng/index.php>, retrieved on December 14, 2010.

**685** Op. cit. Heikkila, E. and Pizarro, R., p. 199.

**686** Gordon Benton, quoted in: Heikkila, E. and Pizarro, R., p. 202.

**687** Leisch goes on to explain that religion is often tied to ethnicity in BSD City: the



large majority of Catholic and Protestant inhabitants are ethnically Chinese, while Muslim inhabitants are almost exclusively indigenous Javanese. See: Leisch, H., "Structures and Functions of Private New Towns in Jabotabek", in: Nas, P.J.M. (ed), *The Indonesian New Town Revisited*, Lit Verlag, Germany, 2002, p. 94.

**688** Firman, T., "New Town Development in Jakarta Metropolitan Region: A Perspective of Spatial Segregation", *Habitat International*, 28, 2004, p. 362.

**689** Leisch, H., "Structures and Functions of Private New Towns in Jabotabek", in:



Ocean Park Water Adventure is one of the main attractions in BSD City, 2010.

Nas, P.J.M. (ed), *The Indonesian New Town Revisited*, Lit Verlag, Germany, 2002, p. 92.

**690** The money could be contributed to the Governor's 'Lovely Houses Foundation' (Sawang Kadulah) in lieu of construction. See: Silver, C., *Planning the Megacity: Jakarta in the 20th Century*, Routledge, New York, 2008, p. 169.

**691** The Final Report also includes a table of Estimated Employment Composition,

and is made up of three rectangles attached at their corners. A large main rectangle holds the garage, living room, dining room and kitchen. A half-bath and stairway make up a small square that comes off of the living room. Another rectangle at the back corner of the lot is connected to the main room by a doorway. This is the master bedroom and bathroom. On the next floor, there is a second living room, two bedrooms and a bathroom. A smaller bedroom and half-bath are accessed separately via another stair at the back of the house.

By not appealing to any specific demographic, BSD City appeals to everyone. In fact, according to a study done by Dr. Leisch, the population of BSD City is almost equally divided among Muslims, Catholics and Protestants—an anomaly in this country.<sup>687</sup> While Doxiadis Associates originally designed the neighborhoods around central mosques, some of the newer zones forego this organization for recreational spaces or public parks. Centro Icon, the circular space at the center of The Icon neighborhood, boasts coconut palm-lined walking and bicycle paths and The Breezone, an open green space for various outdoor activities. There is no religious building to be found.

## Voluntary segregation

Indonesian developers are required by law to construct housing in a ratio of 1:3:6; in other words, for every luxury residence there must also be three middle class dwellings and six lower-income homes. According to Dr. Leisch, the law is generally upheld, yet strangely, the lower-classes remain in the minority

in most JMR New Towns. Various ways around the regulation have allowed developers to bypass construction of low-income housing, if they so choose. According to Dr. Firman, the result is that the 1:3:6 regulation *as intended* is almost universally ignored.<sup>688</sup> Some New Towns get around the regulations by building 'low-income' housing that is so extravagant that only wealthy people can afford it. In BSD, "low-cost houses are indeed affordable, but... the living environment is not very inviting."<sup>689</sup> Another way around the regulation came when a ruling in the 1980s allowed developers to contribute IDR 1.6 million (roughly \$1,000 at the time) per unit to a government fund rather than construct low-income housing.<sup>690</sup> This provided a convenient and cheaper alternative for developers who chose to concentrate their resources on constructing luxury homes. Even Doxiadis Associates' Final Report on BSD City concedes that, "Out of the total demand for urban housing units in the Jabotabek region... only a fraction can afford to purchase a property in the BSD new city. This fraction constitutes the group of potential buyers or the target group out of which the new city will attract clients. According to the findings of the... market reports and taking into consideration the cost of a property and the households' propensity to save for such a purchase, only the households which have a monthly income of more than IDR 2.5 million (\$1,100 at 1995 exchange rates) can afford to buy a plot or a house in the

new city. ...This target group is estimated at about 9% of all households in 1995."<sup>691</sup>

In a recent article on Indonesian New Towns, Dr. Firman makes it clear that urban planning trends have contributed to the increased isolation of social and economic groups. In Indonesia, "New Town development has reinforced spatial segregation in three ways: First, it has polarized the middle and upper income groups, resulting in scattered pockets of exclusive residential areas. Second, within the New Towns themselves, the upper middle and high class occupied exclusively designed areas with the highest security possible. Third, in several New Towns, urban development management is carried out by the developers instead of by the city hall. The spatial segregation in JMR can be classified as 'self segregation' or 'voluntary segregation.' It will continue and is inevitable, a result of socio-economic and political conditions within the urban society as a whole."<sup>692</sup>

Even within BSD City, income groups vary from those below the poverty line to the mind-bogglingly rich. This juxtaposition is a remnant of the Final Master Plan. Before it was developed, the land along the Cisdane River was used for agriculture, a rubber plantation and a number of *kampungs*, (traditional Malay villages). Doxiadis Associates and John Portman Associates decided to include the *kampungs* in the design. New neighborhoods would be built around the existing ones, preserving the indigenous aesthetic and creating a more complex social structure. But things have not gone exactly as planned. Some of the *kampungs*, such as Rawa Buntu, are now fully surrounded by BSD neighborhoods. Because they offer the most affordable housing options, the encircled villages may house service workers or domestic employees for the BSD City residents.<sup>693</sup> As the city's built fabric has expanded, tensions between villagers and BSD residents have increased. In 2009, things came to a head when the residents of Lengkong Gudang kampung sued PT Bumi Serpong Damai for allegedly walling off their village with a three-meter-high concrete barrier. Residents claimed PT BSD had cut off the road connections and there was no remaining access to the village other than a footpath up a steep, muddy embankment. The villagers won their battle in court, although BSD has since appealed the ruling.<sup>694</sup>

This event is indicative of the widening gap between the classes. As the rich get richer, there is no corresponding relief for the poor. Coupled with pervasive ethnic tensions, Indonesia looks poised to face more clashes in the future. BSD City acts as a sort of miniaturized version of the urban planning issues facing the entire JMR. As the city continues to expand, more and more *kampung*-dwellers will be forced to choose between being engulfed by stucco and asphalt, or searching for accommodation elsewhere. How the BSD management chooses to deal with this reality will determine the New Town's future. For now, though, BSD's 'Five Pillars' characterize the collective aspirations of every middle class family. If tensions continue to rise, those guards and gates may become even more attractive.

which projects ratios for the next twenty years. In 1995, 12% of the population should be employed in the 'offices/banking' sector, 16% in 'shopping/recreation', 8% in industry, 48% in construction and 16% in other sectors. By 2010, the working population should shift drastically, and 36% should be employed in 'office/banking', 34% in 'shopping/recreation', 7% in industry, just 13% in construction and 10% in other sectors. See: Bumi Serpong Damai New City Final Master Plan Report, Doxiadis Associates, John Portman & Associates, PT Enconca Engineering Inc., March 1996, p. 17.

**692** Firman, T., "New Town Development in Jakarta Metropolitan Region: A Perspective of Spatial Segregation", *Habitat International*, 28, 2004, pp. 349-368.

**693** It should also be mentioned that kampung dwellers often live in harmony with the wealthier BSD dwellers, providing needed services within the community. See: Winarso, H., "Urban Dualism in the Jakarta Metropolitan Area", in: Sorenson, A. and Okata, J. (eds), *Megacities: Urban Form, Governance and Sustainability*. Springer, Tokyo, 2011, p. 181.

**694** Widhiarto, H., "Court Orders Developer to Reopen Disputed Road", *The Jakarta Post*, November 3, 2010.





Ruko Golden Road, one of the shopping and restaurant areas in BSD City, is a riot of color and stylistic influences.



# Suggested Reading:

## MASDAR CITY

Bouman, O. with Khoubrou, M. and Koolhaas, R. (eds), “Al Manakh”, Volume 12, Stichting Archis, 2007.

Cleveland, W.L. and Bunton, M. (eds), A History of the Modern Middle East (4th edition), Westview Press, Boulder, 2009.

Elsheshtawy, Y. (ed), Planning Middle Eastern Cities: An Urban Kaleidoscope in a Globalizing World, Routledge, New York, 2004.

Elsheshtawy, Y. (ed), The Evolving Arab City: Tradition, Modernity & Urban Development, Routledge, Oxfordshire, 2008.

Reisz, T. (ed), “Al Manakh 2”, Volume 23, Stichting Archis, 2010.

## TIANJIN ECO-CITY

Bun, K.M., The Salt Merchants of Tianjin: State Making and Civil Society in Late Imperial China, University of Hawai'i Press, Honolulu, 2001.

Mu, Y. and Fook, L.L., “Sino-Singapore Tianjin Eco-City: Features of a Model of Sustainable Living”, in: Swee-Hock, S. and Wong, J. (eds), Regional Economic Development in China, ISEAS Publishing, Singapore, 2009, pp. 235-259.

Fook, L.L. and Gang, C. (eds), Towards a Livable and Sustainable Urban Environment: Eco-cities in East Asia, World Scientific Publishing Co. Pte. Ltd., Singapore, 2010.

## ZIRA ISLAND

De Waal, T., Black Garden: Armenia and Azerbaijan through Peace and War, New York University Press, New York, 2003.

Ingels, B., Yes is More: An Archicomic on Architectural Evolution, Evergreen, 2009.

Rummel, R.J., Death by Government, Transaction Publishers, New Brunswick, 1994.

Swietochowski, T., Russia and Azerbaijan: A Borderland in Transition, Columbia University Press, 1995.

Swietochowski, T., Russian Azerbaijan 1905-1920: The Shaping of National Identity in a Muslim Community, Cambridge University Press, Cambridge, 2004.

## NAYPYIDAW

Carey, P. (ed), Burma: the Challenge of Change in a Divided Society, MacMillan, Houndmills, 1997.

Charney, M.W., A History of Modern Burma, Cambridge University Press, Cambridge, 2009.

Fink, C., Living Silence: Burma Under Military Rule. White Lotus, Bangkok, 2001.

Hardin, B., “Grim Regime: A Special Report; For Burmese, Repression, AIDS and Denial”, The New York Times, November 14, 2000.

Preecharuhh, D., Naypyidaw: The New Capital of Burma, White Lotus, Bangkok, 2009.

Skidmore, M. (ed), Burma: At the Turn of the 21st Century, University of Hawai'i Press, Honolulu, 2005.

Inside the Secret City - Burma, Produced by SBS/Dateline, 2006.

## ASTANA

Anacker, S., “Geographies of Power in Nazarbayev’s Astana”, in: Eurasian Geography and Economics, 2004, 45, No. 7, pp. 515-533.

Bender, J. and Pozdorovkin, M. (directors), Capital, Produced by Third Party Productions, 2010.

Dmitrieva, M. and Kliems, A., The Post-Socialist City: Continuity and Change in Urban Space and Imagery, Jovis Diskurs, Berlin, 2010.

Huttenbach, H.R., “Whither Kazakstan? Changing capitals: From Almaty to Aqmola/Astana”, in: Nationalities Papers, Vol. 26, Issue 3, September 1998, pp. 581-587.

The Study on the Master Plan for the Development of the City of Astana in the Republic of Kazakhstan, Japan International Cooperation Agency, 2001.

Kurokawa, K., The Philosophy of Symbiosis, Kodansha International, 1997.

Schatz, E., “What Capital Cities Say About State and Nation Building”, in: Nationalism and Ethnic Politics, Vol. 9, Issue 4, 2004, pp. 111-140.

Schatz, E., Modern Clan Politics: The Power of “Blood” in Kazakhstan and Beyond, University of Washington Press, Seattle, 2004.

Wright, H., Instant Cities, Black Dog Publishing, London, 2008.

## SAADIYAT ISLAND

“The Island of Happiness”: Exploitation of Migrant Workers on Saadiyat Island, Abu Dhabi, Human Rights Watch, New York, 2009.

Abdullah, M.M., The United Arab Emirates: A Modern History, Croom Helm, New York, 1978.

Cleveland, W.L. and Bunton, M. (eds), A History of the Modern Middle East (4th edition), Westview Press, Boulder, 2009.

Elsheshtawy, Y. (ed), The Evolving Arab City: Tradition, Modernity & Urban Development, Routledge, Oxfordshire, 2008.

Jacob, G., Museum Design: The Future, Booksurge, Charleston, 2009.

Michell, G. (ed), Architecture of the Islamic World: Its History and Social Meaning, Thames and Hudson, London, 1978.

Ragette, F., Traditional Domestic Achitecture of the Arab Region, American University of Sharjah, Sharjah, 2003.

The Economist, Volume 352, Edition 8126-8130, 1999, p. 69

The Report: Abu Dhabi 2009, Oxford Business Group, Dubai, 2009.

## CAMKO CITY

Ayers, D.M., Anatomy of a Crisis: Education, Development, and the State in Cambodia 1953-1998, University of Hawai'i Press, Honolulu, 2000.

Chandler, D., A History of Cambodia (4th edition), Westview Press, Boulder, 2007.

Grant Ross, H. and Collins, D.L., Building Cambodia: ‘New Khmer Architecture’ 1953-1970, The Key Publisher Co. Ltd., Bangkok, 2006.

Owen, N.G. (ed), The Emergence of Modern Southeast Asia: A New History. University of Hawai'i Press, Honolulu, 2004.

Totten, S., Parsons, W.S. and Charny, I.W., Century of Genocide. Routledge, 2004.

Joffé, R. (director), The Killing Fields, Produced by Enigma (First Casualty) Ltd., 1984.

Sambeth, T and Lemkin, R. (directors), Enemies of the People: One’s Man’s Journey to the Heart of the Killing Fields, Produced by Old Street Films, 2011.

## BINH DUONG NEW CITY

Anderson, D.L., The Columbia History of the Vietnam War, Columbia University Press, New York, 2011.

Biggs, D., Quagmire: Nation Building and Nature in the Mekong Delta, University of Washington Press, Seattle, 2011.

Edwards, A., Saigon: Mistress of the Mekong, Oxford University Press, Oxford, 2003.

Gubry, P., et al. (eds), The Vietnamese City in Transition, Institute of Southeast Asian Studies (ISEAS), Singapore, 2010.

Pelley, P. M., Postcolonial Vietnam; New Histories of the National Past, Duke University Press, Durham, 2002.

## KING ABDULLAH ECONOMIC CITY

Al-Mubarak, F.A., “Oil, Urban Development and Planning in the Eastern Province of Saudi Arabia: The Case of the Arab American Oil Company in the 1930’s-1970’s”, in: Journal of King Saud University, Architecture & Planning, Vol. 11, 1999, pp. 31-51.



Al-Naim, M.A., “Conservatism versus Modernism: Hesitant Urban Identity”, in: The Middle East Institute Viewpoints Special Edition: Architecture and Urbanism in the Middle East, **The Middle East Institute, Washington DC, November 2008, pp. 28-32.**

Al-Naim, M.A., “Riyadh: A City of ‘Institutional’ Architecture”, in: Elsheshtawy, Y. (ed), *The Evolving Arab City: Tradition, Modernity and Urban Development*, **Routledge, New York, 2008.**

Al-Qawasmi, J., Moustafa, A. and Mitchell, K. (eds), *Instant Cities: Emergent Trends in Architecture and Urbanism in the Arab World*, **CSAAR Press, Amman, 2008.**

Al-Rasheed, M., *A History of Saudi Arabia (2nd edition)*, **Cambridge University Press, Cambridge, 2010.**

Al-Said, F.A.M., *The pattern of structural transformation of the Saudi Contemporary Neighbourhood: The case of Al-Malaz, Riyadh, Saudi Arabia*, **39th ISoCaRP Congress, Cairo, 2003.**

Alshuwaikhat, H.M., “Appropriateness of traditional neighborhood concept for planning contemporary neighborhood units”, in: *GeoJournal*, **31, No. 4, 1993, p. 398.**

Cleveland, W.L. and Bunton, M., *A History of the Modern Middle East (4th edition)*, **Westview Press, Boulder, 2009.**

Lacey, R., *Inside the Kingdom: Kings, Clerics, Modernists, Terrorists and the Struggle for Saudi Arabia*, **Viking Penguin, London, 2009.**

Shukri, I., Alshuwaikhat, H., and Garba, S., “City Size Distribution in the Saudi Arabian System”, *International Planning Studies*, Vol. 1, No. 2, 1996, pp. 185-198.

Abu-Ghazzeah, T., “Vernacular Architecture Education in the Islamic Society of Saudi Arabia: Towards the Development of an Authentic Contemporary Built Environment”, in: *Habitat International*, Vol. 21, No. 2, 1997, pp. 229-253.

Vassiliev, A., *The History of Saudi Arabia*, **New York University Press, New York, 2000.**

Weston, M., *Prophets and Princes: Saudi Arabia from Muhammad to the Present*, **John Wiley and Sons, Hoboken, 2008.**

### MAGARPATTA

Ahluwalia, I.J, and Nair, R., “Magarpatta: Building a City with Rural-Urban Partnership”, *indianexpress.com*, **May 26, 2010. See:** <http://www.indianexpress.com/news/magarpatta-building-a-city-with-ruralurban/623701/>, **retrieved on September 9, 2010.**

“Magarpatta: A Dream Town Worth Emulating”, *www.screenindia.com*, **August 30, 2004. See:** <http://www.screenindia.com/news/magarpatta-a-dream-town-worth-emulating/113825/>, **retrieved on February 10, 2010.**

Sankhe, S., Vittal, I., Dobbs, R. and Mohan, A., *India's urban awakening: Building inclusive cities, sustaining economic growth*, **McKinsey and Company, USA, 2010.**

Panagariya, A., *India: The Emerging Giant*, **Oxford University Press, USA, 2010.**

Ramesh, G., Nagadevara, V.P., Naik, G. and Suraj, A., *Urban Infrastructure and Governance*, **Routledge, India, 2010.**

Sinha, J., “A Case of Public Acts and Private Ambitions”, in: *Outlook Business*, **September 7-20, 2008, pp. 30-32.**

### CYBERJAYA

Thong, L.B., “New Towns in Malaysia: Development and Planning Policies”, in: Philips, D. R. and Yeh, A. G.O. (eds), *New Towns in East and South-east Asia: Planning and Development*, **Oxford University Press, Oxford, 1987, pp. 153-169.**

Marshall, R., *Emerging Urbanity: Global Urban Projects in the Asia Pacific Rim*, **Spon Press, London, 2003, pp. 169-189.**

Bunnell, T., “Cyberjaya and Putrajaya: Malaysia's Intelligent Cities”, in: Graham, S. (ed), *The Cyber Cities Reader*, **Routledge, London, 2004, pp. 348-353.**

### SONGJIANG NEW CITY

Chang, G.G., *The Coming Collapse of China*. **Random House, New York, 2001.**

Campanella, T.J., *The Concrete Dragon: China's Urban Revolution and What it Means for the World*, **Princeton Architectural Press, New York, 2008.**

Gifford, R., *China Road: a Journey into the Future of a Rising Power*, **Random House, New York, 2008.**

Gil, I., (ed), *Shanghai Transforming*, **Actar, Barcelona, 2008.**

Den Hartog, H., *Shanghai New Towns - Searching for community and identity in a sprawling metropolis*, **010 Publishers, Rotterdam, 2010.**

Hessler, P., “China's Instant Cities”, *National Geographic*, **June 2007. See:** <http://ngm.nationalgeographic.com/2007/06/instant-cities/hessler-text>

Hornsby, A. and Mars, N., *The Chinese Dream: A Society Under Construction*, **010 Publishers, Rotterdam, 2008.**

Lu, X., *China, China... Western Architects and City Planners in China*, **Hatje Canz Verlag, Ostfildern, 2008.**

McGetrick, B. (ed), *Work in Progress: Selections from Urban China Magazine*, **Timezone 8, Hong Kong, 2010.**

Liauw, L. (ed), *New Urban China*, **Architectural Design, September/October 2008.**

Ouroussoff, N., “The New, New City”, in: *The New York Times Magazine: The Architecture Issue*, **June 8, 2008. See:** <http://www.nytimes.com/2008/06/08/magazine/08shenzhen-t.html>

Ruby, I. and Ruby, A. (eds), *Urban Transformation*, **Ruby Press, Berlin, 2008.**

Wasserstrom, J.N., *Global Shanghai, 1850–2010: A History in Fragments*, **Routledge, New York, 2009.**

Wright, H., *Instant Cities*, **Black Dog Publishing, London, 2008.**

Wu, X., “Work Units and Income Inequality: The Effect of Market Transition in Urban China”, in: *Social Forces*, **80:3, March 2002, pp. 1069-1099.**

### TIN SHUI WAI

Bristow, R., *Hong Kong's New Towns: A Selected Review*, **Oxford University Press, Oxford, 1990.**

Chow, W., *Moving into New Towns: The costs of social adaptation*, **Centre of Urban Studies and Urban Planning, University of Hong Kong, Hong Kong, 1987.**

Ingham, M., *Hong Kong: A Cultural History*, **Oxford University Press, Oxford, 2007.**

Tsang, S., *A Modern History of Hong Kong*, **I. B. Tauris, London, 2007.**

Zacharias, J., “Generating Urban Lifestyle: The Case of Hong Kong New-Town Design and Local Travel Behaviour”, *Journal of Urban Design*, Vol. 10, Issue 3, **October 2005, pp 371-386.**

### BUMI SERPONG DAMAI, INDONESIA

Cowherd, R. and Heikkila, E., “Orange County, Java: Hybridity, Social Dualism and an Imagined West”, in: Heikkila, E. and Pizarro, R. (eds), *Southern California and the World*, **Praeger Publishers, Westport, 2002.**

Hogan, T and Houston, C., “Corporate Cities: Urban Gateways or Gated Communities Against the City? The Case of Lippo, Jakarta”, in: Bunnell, T., Drummond, L. and Chong, H.K. (eds), *Critical Reflections on Cities in Southeast Asia*, **Brill Academic Publishers, Tokyo, 2002, pp. 243-264.**



# Image

## Sources:

All maps © Tom Bokkers / Atelier MASS 2011  
Images by the author unless otherwise noted.

### INTRODUCTION

P. 10-11; Image © AFP 2011  
P. 15; Image © Lu Guang 2008  
P. 16; Aerial image © 2010 Google, © 2011 GeoEye, © 2011 DigitalGlobe  
P. 27; Aerial image © 2010 Google  
P. 28; Aerial image © 2010 Google, © 2011 DigitalGlobe  
P. 38-39; Image © Michelle Provoost 2010

### MASDAR CITY

P. 52; Aerial image © 2010 Google, © 2011 GeoEye, © 2011 DigitalGlobe  
P. 57, 62-63, 67 (Top), 69; Images © Foster + Partners 2010  
P. 64, 65, 68; Images © Masdar City 2011  
P. 67; Bottom image © Abu Dhabi Urban Planning Council 2010  
P. 70; Image © Adrian Smith + Gordon Gill 2010  
P. 71; Image © LAVA Architects 2010

### TIANJIN ECO-CITY

P. 74, 75, 82-83, 86-87, 93, 94; Images © SSTECH 2010  
P. 76; Aerial image © 2010 Google, ©2011 GeoEye, © 2011 Mapabc.com, © 2011 Terrametrics  
P. 80-81, 84, 85; Images © Keppel Land 2010  
P. 88, 90; Images © Urban Redevelopment Authority 2010  
P. 89, 91, 92; Images © Surbana Urban Planning Group 2011

### ZIRA ISLAND

P. 98, 106, 107, 109, 110-111, 112-113, 114-115; Images © BIG 2010  
P. 99; Image © Dmitry A. Kozyrev 2009  
P. 100; Aerial image © 2010 Google, © 2011 DigitalGlobe, © 2011 TerraMetrics  
P. 103; Images © Baku White City 2010  
P. 104-105, 117; Image © Iwan Baan 2011  
P. 116; Image © Keith Mellnick 2010  
P. 121 Wikimedia commons, (Public domain)

### NAYPYIDAW

P. 124, 129, 130, 135, 136-137, 140, 141; Images © Will van Engen 2009  
P. 125; Aerial image © 2010 Google, ©2011 GeoEye, © 2011 Cnes/Spot Image, © 2011 Europa Technologies  
P. 126; Aerial image © 2010 Google, ©2011 GeoEye, © 2011 Mapabc.com  
P. 128; Image © TIME Magazine 2009  
P. 132, 133; Images © DVB 2004  
P. 138-139; Wikimedia Commons, (Public domain)  
P. 142; Image © ANP 2009

### ASTANA

P. 146, 156-157, 161, 163; Images © Slava Stepanov 2011  
P. 147; Image © T. Nittner 1993  
P. 148; Aerial image © 2010 Google, ©2011 GeoEye, © 2011 DigitalGlobe, © 2011 Europa Technologies  
P. 151; Image © Pikolov 2010  
P. 153; Image © Kisho Kurokawa Architects 2010  
P. 154-155; Image © Mir Kvartir 2011  
P. 158 (bottom); Image © Moussaux 2011  
P. 159; Image © Nyon45 2008  
P. 164; Wikimedia Commons, (Public domain)

### THE BLUE CITY

P. 172, 177, 178-179, 182; Images © Foster + Partners 2010  
P. 174; Aerial image © 2010 Google, © 2011 GeoEye, © 2011 LeadDog Consulting, © Data SIO, NOAA, U.S. Navy, NGA, GEBCO  
P. 176; Wikimedia Commons, (Public domain)  
P. 189; Image © Blue City Company I 2010

### SAADIYAT ISLAND

P. 194; Aerial image © 2010 Google, ©2011 GeoEye, © 2011 DigitalGlobe, © Data SIO, NOAA, U.S. Navy, NGA, GEBCO  
P. 196, 198; Images © TDIC 2010  
P. 199; Image © Ateliers Jean Nouvel 2010  
P. 200; Image © Foster + Partners 2010

### CAMKO CITY

P. 212, 223, 224-225, 226-227, 233; Images © Steve Gosselin 2010  
P. 214; Aerial image © 2010 Google, © 2011 Mapabc.com, © 2011 DigitalGlobe, © 2011 Europa Technologies

P. 216, 218; Wikimedia Commons, (Public domain)  
P. 217; Image © Brian Moore 2011  
P. 218; Images © John Caserta 2002  
P. 220; Aerial images © 2010 Google, © 2011 Mapabc.com, © 2011 DigitalGlobe  
P. 221, 222 (top), 228, 229; Images © World City Co., Ltd. 2010  
P. 237; Image © constructionweekonline.com

### BINH DUONG NEW CITY

P. 240, 241, 244, 248, 249, 250-251, 255, 256-257; Image © Joep Janssen 2011  
P. 242; Aerial image © 2010 Google, ©2011 MapIt, © 2011 DigitalGlobe, © 2011 Europa Technologies  
P. 245; Image © Sau Rieng Nguyen 2009  
P. 246 (top); Wikimedia Commons, (Public domain)  
P. 246 (bottom); Image © NUS Center for Design Research 2008  
P. 252; Image © Tung Nguyen Khac 2011  
P. 253, 254; Image © Kiva Dang 2011

### KING ABDULLAH ECONOMIC CITY

P. 260; Image © Armaco World 1961  
P. 261, 264; Wikimedia Commons, (Public domain)  
P. 262; Aerial image © 2010 Google, ©2011 GeoEye, © 2011 DigitalGlobe, © 2011 ORION-ME  
P. 265; Image © PABMEC 2011  
P. 267; Image © The New York Times 2010  
P. 268; Image © SAGIA 2010  
P. 271, 272-273, 276, 277, 279; Images © KAEC 2011  
P. 274, 275; Images © SOM, Crystal CG 2010

### MAGARPATTA

P. 282, 289, 292-293, 298, 299, 301; Images © Nicolette Mastrangelo 2009  
P. 283, 288; Wikimedia Commons, (Public domain)  
P. 284; Aerial image © 2010 Google, ©2011 GeoEye  
P. 286; Image © Olivier Telle, CSH/MTG 2009  
P. 290; Image © Magarpatta City 2010  
P. 294-295; Getty Images 2011  
P. 300; Image © Hadapsar 2011

### NEW SONGDO CITY

P. 308, 323, 328-329, 331; Images © Dan Hill 2009  
P. 309, 313, 316; Images © New Songdo City Development 2009  
P. 310; Aerial Image © 2010 Google, © 2011 ZENRIN, © 2011 DigitalGlobe, © 2011 GeoEye © 2011 SK Energy

P. 312; Image © OMA 2011  
P. 314-315, 322; Images © KPF 2011  
P. 324-325, 330; Wikimedia Commons, (Public domain)  
P. 326; Images © U-life 2010

### CYBERJAYA

P. 334, 338, 339, 340-341; Wikimedia Commons, (Public domain)  
P. 336; Aerial Image © 2010 Google, © 2011 DigitalGlobe  
P. 342 (top); Image © Fern Fendi 2010,  
P. 342 (bottom); Image © Arif Bijaksana 2010  
P. 343, 344-345; Images © Mohd Zairi Mohamad Rozali 2006  
P. 346; Image © UEM Land Berhad 2010

### SONGJIANG NEW CITY

P. 356; Image © Michelle Provoost 2010  
P. 358; Aerial Image © 2010 Google, © 2011 DigitalGlobe  
P. 360; Images © Harry den Hartog 2010  
P. 365; Image © Tom Bokkers 2010

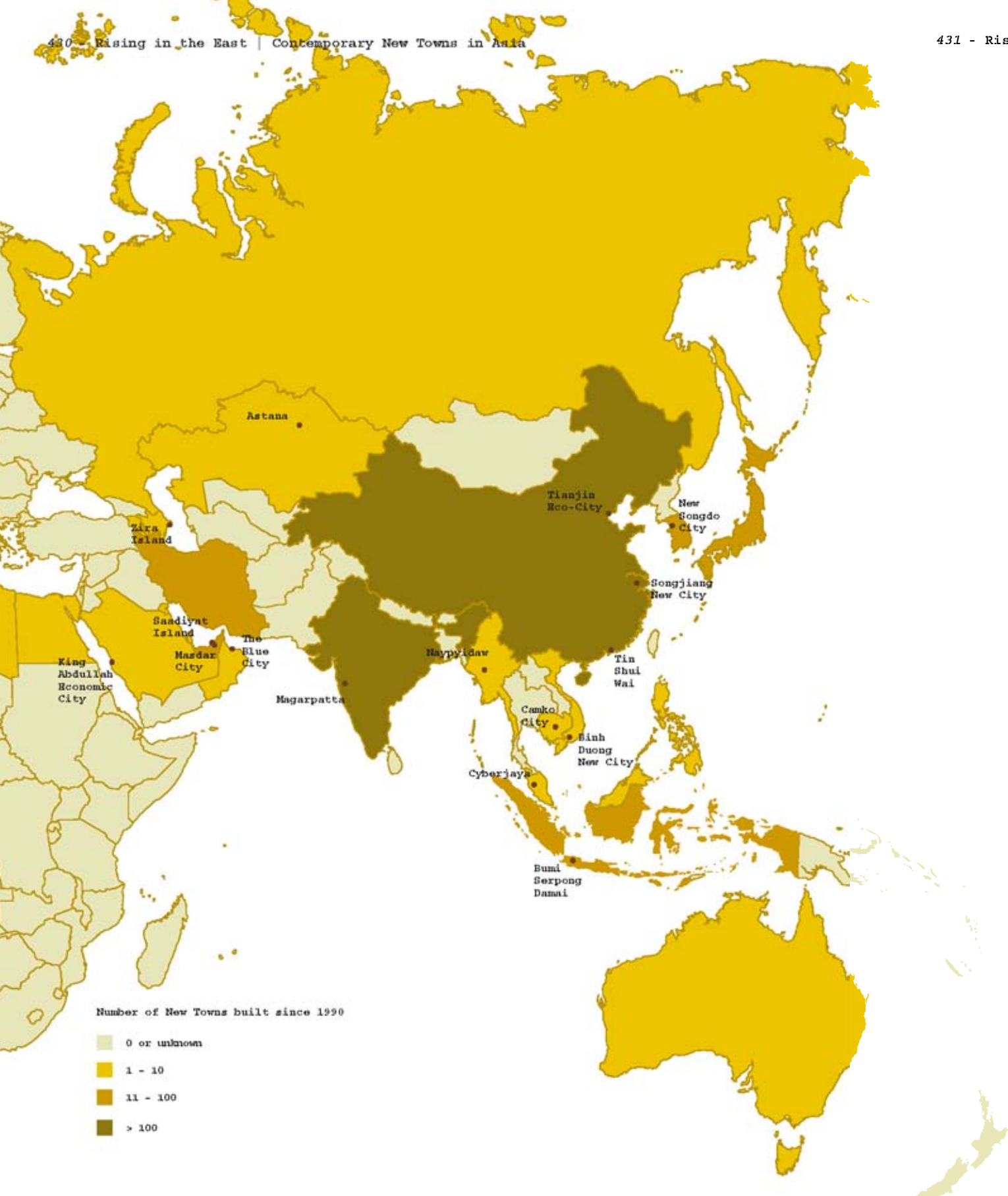
### TIN SHUI WAI

P. 386, 393; Images © Cinémasie  
P. 388; Aerial Image © 2010 Google, © 2011 DigitalGlobe  
P. 394-395, 396-397, 398, 399, 400, 402; Images © Jeroen van Poecke 2010

### BUMI SERPONG DAMAI

P. 406, 413, 415; Image © Doxiadis and Associates 1996  
P. 408; Aerial Image © 2010 Google, © 2011 DigitalGlobe, © 2011 Europa Technologies, © 2011 GeoEye, © 2011 Tele Atlas  
P. 410; Images © Tropenmuseum collection, photographed by G.F.J. Bley (1920-1935)  
P. 412, 416-417, 418; Images © Getty Images 2011  
P. 414, 419, 420, 422-423; Images © BSD City 2011





## Acknowledgments

This project would not have been possible without the contributions of researchers, planners, local inhabitants, academics, photographers and translators from around the world. We would like to thank all of them for lending their talents to make this extensive overview a possibility. Specifically, the International New Town Institute (INTI) would like to thank Harry den Hartog and Todd Reisz for their patience and expertise in reading through early drafts of the manuscript—this text is more accurate and more readable because of them. Tom Bokkers, Will van Engen, Steve Gosselin, Dan Hill, Joep Janssen, Nicolette Mastrangelo, Jeroen van Poecke and Slava Stepanov contributed beautiful photographs to support and clarify that text. Tom Bokkers was also responsible for all the maps throughout the book—a task that presented its own series of challenges.

As assistant researchers, Tom Kolnaar, Joep Janssen, Kyo Suk Lee and Daniel Yunpeng Zhang were helpful beyond description. Their detailed analyses and thoughtful insights are present everywhere throughout these pages. INTI would also like to thank the design offices that gladly contributed their private planning documents and unpublished images to strengthen these stories. BECAMEX, Bjarke Ingels Group (BIG), Doxiadis and Associates, Foster + Partners, Gensler, Kisho Kurokawa Architect and Associates, Kohn Petersen Fox (KPF) and Office for Metropolitan Architecture (OMA) were all incredibly generous with both imagery and information.

Finally, we would be remiss not to thank the dozens of locals that were interviewed to gain a better understanding of life in a New Town. Their experiences and honesty were inspiring, and this book is for them.



## Authors:

**Rachel Keeton** is an American architect, writer and researcher. Before her involvement with INTI, Rachel worked as an editor and author in the United States and England, and has published articles in various magazines and journals. She graduated from the TU Delft, NL in 2008. Since 2009 she has worked as a researcher at INTI, giving guest lectures at TU Delft and the University of Amsterdam, as well as organizing international conferences and lecture evenings. For the past two years this research project has been her main focus.

**Michelle Provoost** is an architectural historian, founding member of Crimson Architectural Historians and since 2008 director of INTI. Prior to this, Dr. Provoost worked as Program Director for *WiMBY!*, an urban regeneration project in Rotterdam-Hoogvliet, and as Curator at the Dutch Architecture Institute (*Nederlands Architectuur Instituut*, NAI) between 1998 and 2001. In 2003 she published a monograph of Dutch architect Hugh Maaskant (*Hugh Maaskant, Architect of Progress*), she (co) authored and edited books like *Too Blessed to Be Depressed. Crimson Architectural Historians 1994 - 2002* and *The Big WiMBY! Book. Future, Past and Present of a New Town* (Rotterdam 2007). She has authored many publications and articles in national and international magazines including *Archis*, *Arch+* and *Harvard Design Magazine*. She teaches at various universities and lectures regularly throughout Europe, China and the United States.

**Wouter Vanstiphout** is an architectural historian and founding member of Crimson Architectural Historians. Since 2009 Wouter Vanstiphout has been Professor of Design and Politics at the Faculty of Architecture at Delft Technical University, a publicly endowed chair aimed at bridging the gap between political agendas and design knowledge. One of the main subjects of the research and the teaching carried out at his chair is the relationship between urban planning, urban politics and urban violence. He has (co)authored books like *Mart Stams Trousers, Stories from behind the scenes of Dutch Moral Modernism* (Rotterdam 1999), *Too Blessed to Be Depressed. Crimson Architectural Historians 1994 - 2002* and *The Big WiMBY! Book. Future, Past and Present of a New Town* (Rotterdam 2007). Wouter Vanstiphout has taught at various universities like TU Berlin and Yale University and lectures regularly throughout Europe and the United States.



With detailed investigations of the social, historical, political and economic influences that drive Asia's supercharged urbanization, here is the shocking story of the most recent generation of New Towns. New Towns that defy our expectations in every way: some are unimaginably huge cities built from scratch to house millions of future inhabitants. Some are secret cities, constructed in the hinterland by paranoid, autocratic governments. Others have been designed as overgrown gated-communities—walled enclaves that reinforce the spatial segregation that often accompanies emerging economies.

Though young, these New Towns' short histories are already wrought with political intrigue, financial corruption, ruthless displacements and cutthroat strategizing. Their justifications are often unrecognizable to people familiar with the altruistic origins of New Town planning. This collection of case studies follows these New Towns' astonishing development all the way from inspiration to inhabitation. This is the story behind the story of urbanization in Asia.



9 789461 056832 >