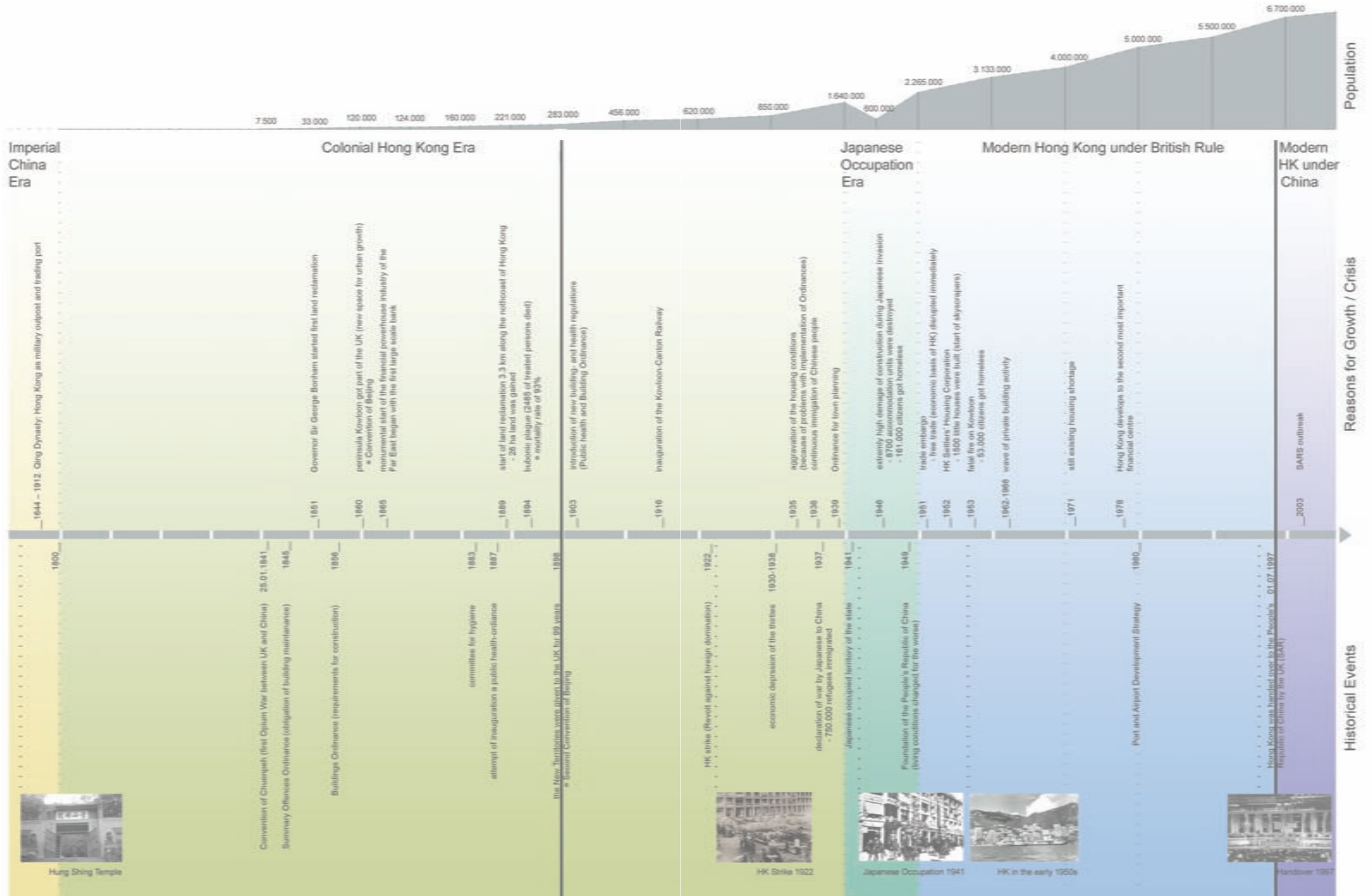


# Urban structure of Hong Kong - historical timeline



# Urban structure of Hong Kong - Land reclamation

Hong Kong is located at the Pearl River Delta. From the total area of about 1.100 km<sup>2</sup> is only a part of 25 % urbanized. The reason for this is the bold relief with a lot of steep slopes. Only in the North of the New Territories are some bigger plains.

The remaining land is remarkably green with about 40% of the landmass reserved as country parks and nature reserves. Most of the territory's urban development exists on the Kowloon peninsula, along the northern shores of Hong Kong Island and in scattered settlements throughout the New Territories.

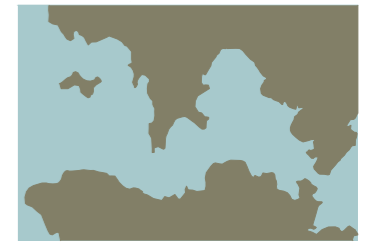
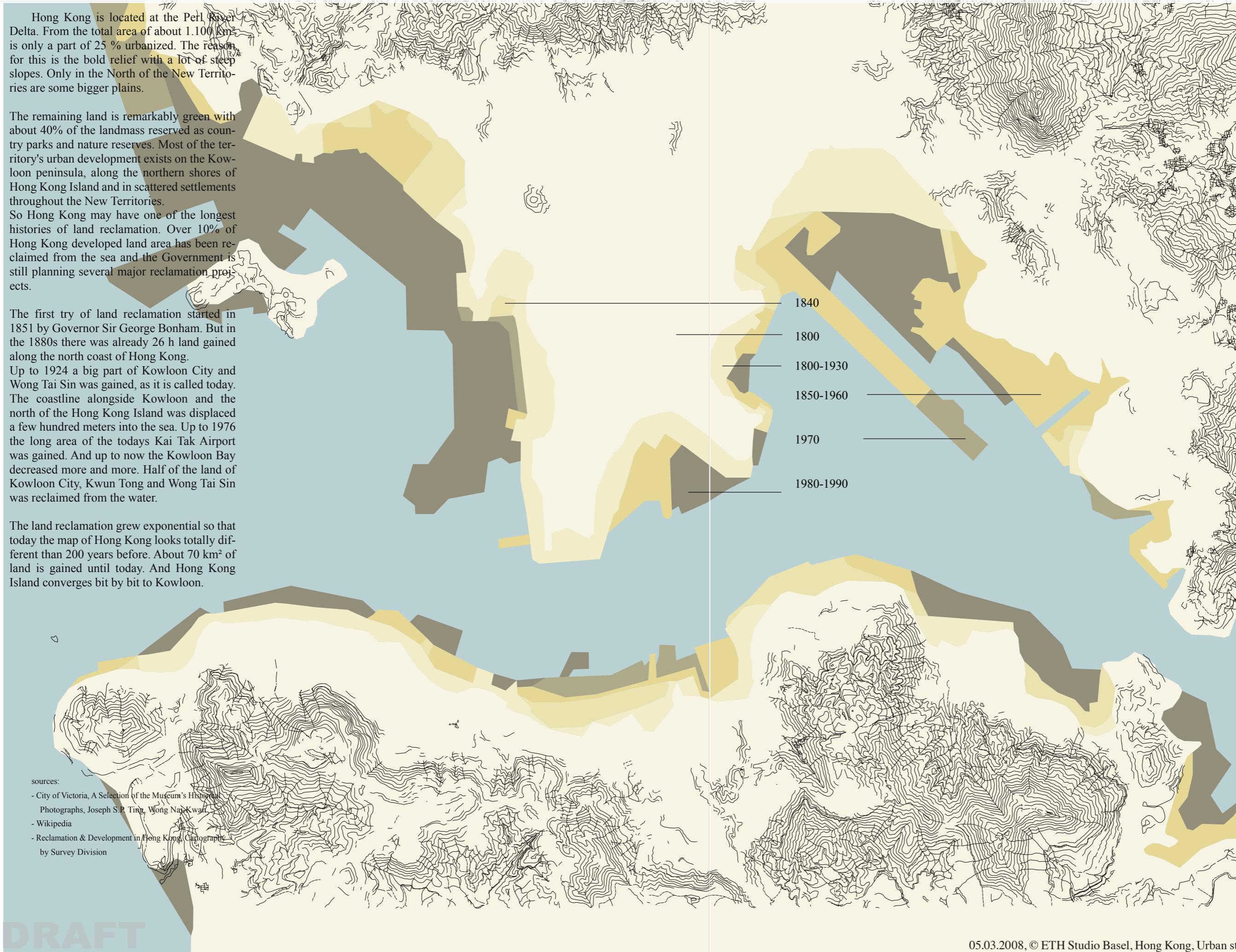
So Hong Kong may have one of the longest histories of land reclamation. Over 10% of Hong Kong developed land area has been reclaimed from the sea and the Government is still planning several major reclamation projects.

The first try of land reclamation started in 1851 by Governor Sir George Bonham. But in the 1880s there was already 26 h land gained along the north coast of Hong Kong.

Up to 1924 a big part of Kowloon City and Wong Tai Sin was gained, as it is called today. The coastline alongside Kowloon and the north of the Hong Kong Island was displaced a few hundred meters into the sea. Up to 1976 the long area of the today's Kai Tak Airport was gained. And up to now the Kowloon Bay decreased more and more. Half of the land of Kowloon City, Kwun Tong and Wong Tai Sin was reclaimed from the water.

The land reclamation grew exponential so that today the map of Hong Kong looks totally different than 200 years before. About 70 km<sup>2</sup> of land is gained until today. And Hong Kong Island converges bit by bit to Kowloon.

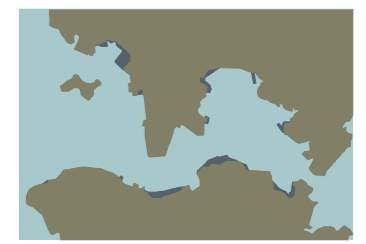
- sources:
- City of Victoria, A Selection of the Museum's Historical Photographs, Joseph S.P. Ting, Wong Nai-Kwun
  - Wikipedia
  - Reclamation & Development in Hong Kong, Cartography by Survey Division



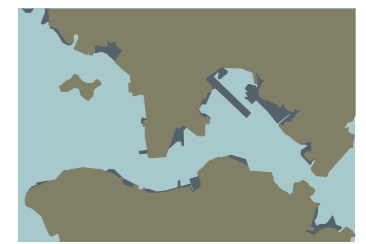
1800



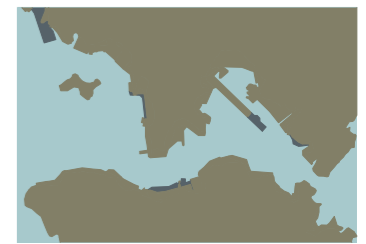
1800-1930



1840



1850-1960



1970



1980-1990

# Urban structure of Hong Kong - Urban Development

Already in the early days of Hong Kong demographic and economic forces required a big need of land. The Island which was given to Britain as trading base in 1841 developed to a partly very compact city-shape with dense populated two- or three storey buildings on the lower hills of the Mt. Victoria.

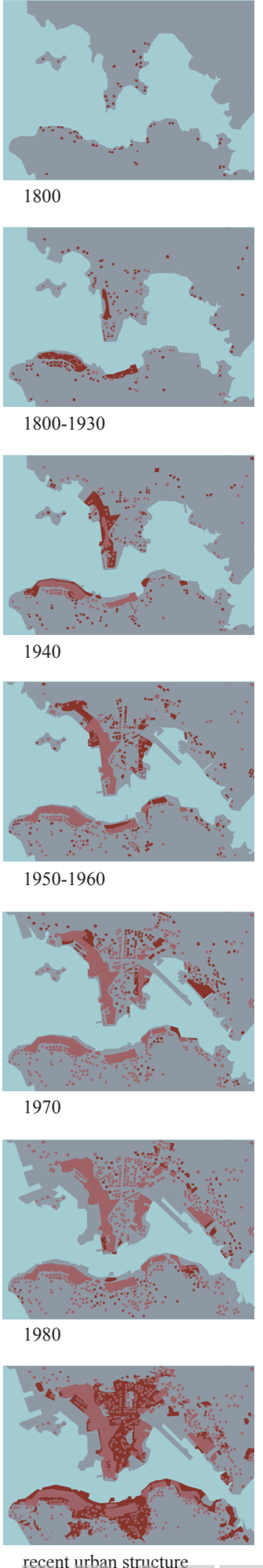
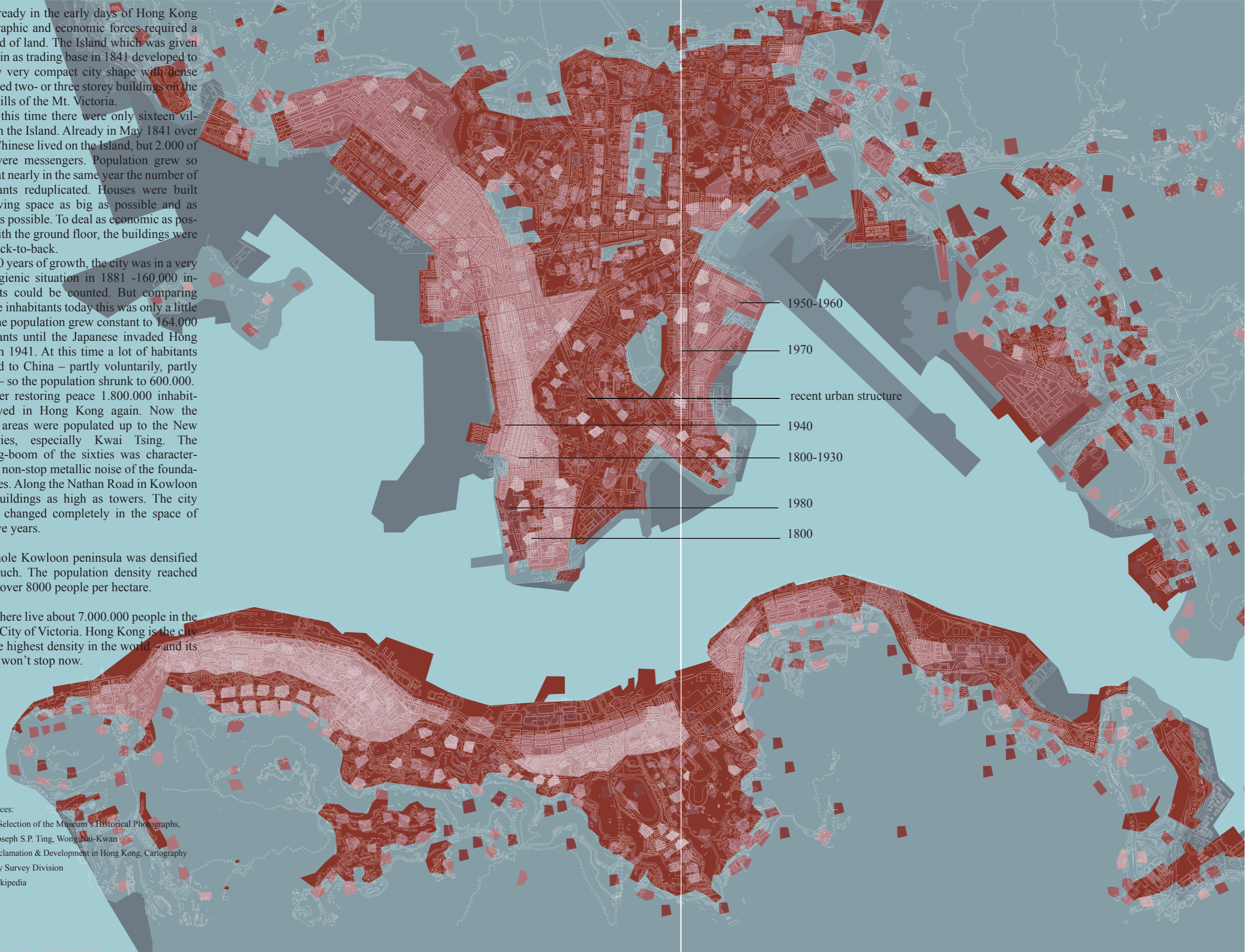
Before this time there were only sixteen villages on the Island. Already in May 1841 over 7.400 Chinese lived on the Island, but 2.000 of them were messengers. Population grew so fast, that nearly in the same year the number of inhabitants reduplicated. Houses were built with living space as big as possible and as cheap as possible. To deal as economic as possible with the ground floor, the buildings were built back-to-back.

After 40 years of growth, the city was in a very bad hygienic situation in 1881 -160.000 inhabitants could be counted. But comparing with the inhabitants today this was only a little part. The population grew constant to 164.000 inhabitants until the Japanese invaded Hong Kong in 1941. At this time a lot of habitants returned to China – partly voluntarily, partly forced – so the population shrunk to 600.000. But after restoring peace 1.800.000 inhabitants lived in Hong Kong again. Now the coastal areas were populated up to the New Territories, especially Kwai Tsing. The building-boom of the sixties was characterized by non-stop metallic noise of the foundation piles. Along the Nathan Road in Kowloon grew buildings as high as towers. The city skyline changed completely in the space of only five years.

The whole Kowloon peninsula was densified very much. The population density reached data of over 8000 people per hectare.

Today there live about 7.000.000 people in the former City of Victoria. Hong Kong is the city with the highest density in the world – and its growth won't stop now.

- sources:
- A Selection of the Museum's Historical Photographs, Joseph S.P. Ting, Wong Sai-Kwan
  - Reclamation & Development in Hong Kong, Cartography by Survey Division
  - Wikipedia



# Urban structure of Hong Kong - Historical Periodization of Urban structure \_ Wan Chai Development

Wan Chai also known as Ha Wan, was one of the earliest developed districts on Hong Kong.

It has been extended outward with a series of land reclamation schemes. Early in 1841, where the earliest coastline was located at Queen's Road East, the first reclamation took place. The project was privately funded and the government did not take part. Spring Gardens was developed into a splendid waterfront residential area. Godowns were built at the foot of Hospital Hill and along Wan Chai Road, as well as a cemetery on the slope west of Spring Gardens.

In response to the high increase of population in the 1850s and 1860s, the Government developed Stone Nullah Lane and the south side of Hospital Hill into a Chinese residential area. Dockyards and godowns were built at the waterfront of Wan Chai. In 1904 the tramway service was opened between Kennedy Town and Shau Kei Wan along the section of praya which later become known as Johnston Road and Hennessy Road.

The next reclamation that had an effect on Wan Chai was the Praya East Reclamation Scheme. The coastline was extended to Praya East, that is, today's Gloucester and Hennessy Road. The Praya East reclamation was completed in 1931.

Two temples, namely the Hung Shing Temple at Queen's Road and the Yuk Hui Temple at Lung On Street are located at Wan Chai.

But another quiet big area of 70.000 m<sup>2</sup> was reclaimed from 1965 till 1972 after the World War II. It pulled the coastline out to the areas around Convention Avenue and the Wan Chai Pier. On this area the first HKCEC (Hong Kong Convention and Exhibition Centre) was build in 1988.

The second phase of the centre, located on a new artificial island, was constructed from 1994 to 1997. It is connected to the old phase with an atrium link - a sky bridge, and to Convention Road with two road bridges.



1842-1902



1922-1931



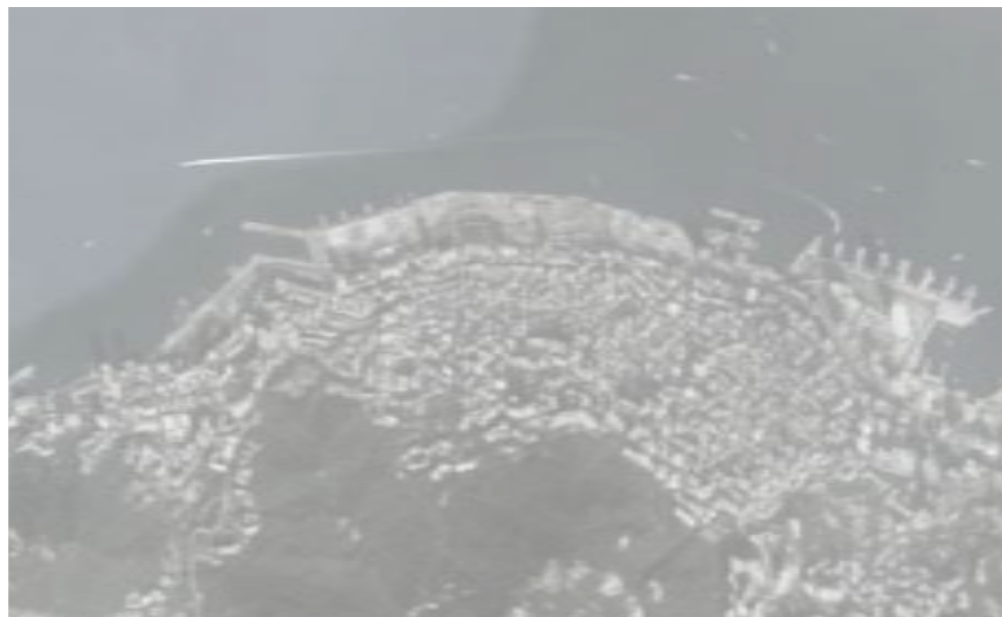
1965-1972



1994-1997



today



sources:

- City of Viktoria, A Selection of the Museum's Historical Photographs, Joseph S.P. Ting, Wong Nai-Kwan
- Wikipedia

# Urban structure of Hong Kong - Skyline

## Developing a City Skyline for Hong Kong

Hong Kong is a metropolis with a dense population. The need to cope with rapid growth under the constraint of limited amounts of developable lands has resulted in a concentrated development of high-rise. Buildings have been constructed to maximum heights whenever a height restriction was not specified in the authorization to build, or stretched to their limits sideways if given a height restriction.

Hong Kong is blessed with a picturesque image along high hills overlooking the Victoria Harbour. This stretch of urban landscape is characterized with high-rises set against a mountainous backdrop. Such a unique urban montage has become the image and identity of Hong Kong. Cities today are much more concerned about their images because a good impression is the key to tourist attraction.

Unfortunately this beautiful vista has gradually been breached by uncontrolled high-rise developments along the harbour front. Many citizens have protested that exceptionally tall buildings have blocked views of inland sceneries and landscape.

The Urban Design Guidelines of Hong Kong recommend that at least 20% of building free zone must be sustained against the backdrop of ridgelines.

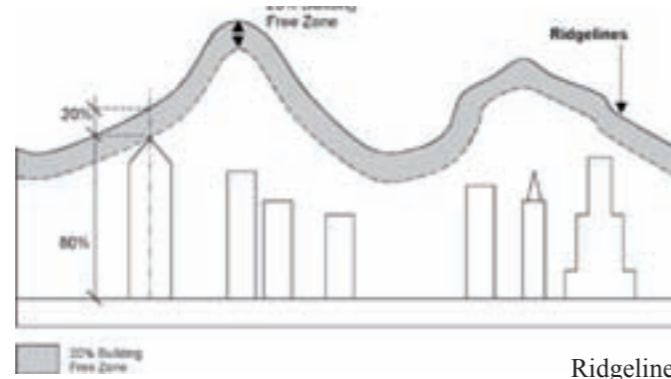
Furthermore there is a profile analysis for Recommending Maximum Building Heights. Variations in relief and building height will introduce a more dynamic cityscape. Taller developments should be located inland with lower structures closer to the waterfront.

Figure A is a cross-sectional view from the harbour to ridgelines of the Hong Kong Island. Some of the mega-towers have been high-lighted to contrast their existence against surrounding buildings.

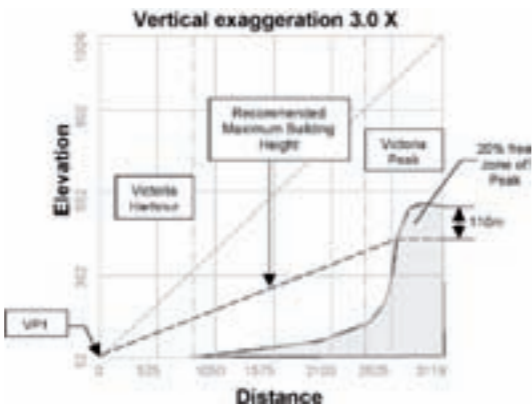
Figure B highlights the existing silhouette of the city along with the line that delineates the 20% building free zone. It is apparent that some of the mega-towers have intruded upon the zone.

Figure C shows some lower structures along the waterfront, which should be closed and diversified.

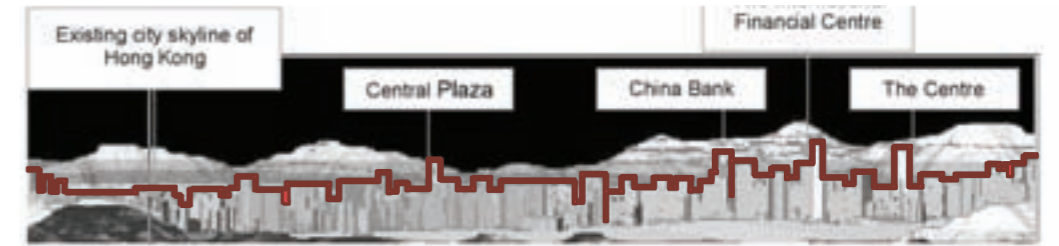
It is also clear that there is room in developing a more spectacular and dynamic skyline of Hong Kong.



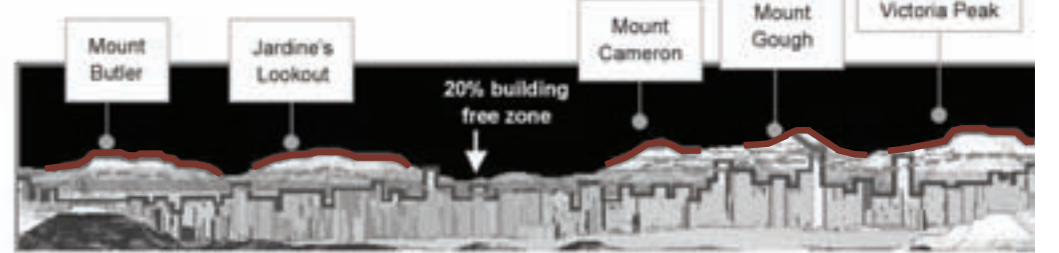
Ridgeline Protection with 20% Building Free Zone



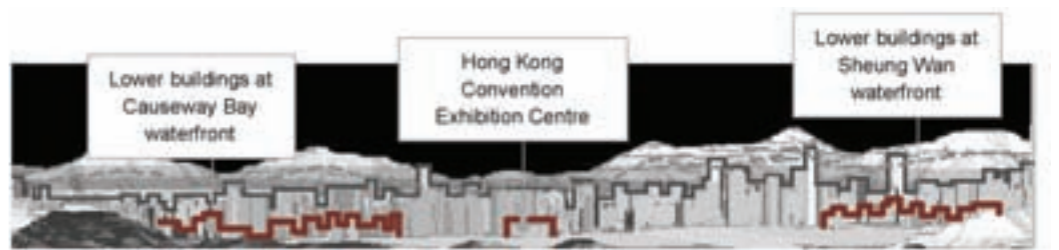
Profile Analysis of Hong Kong



A Existing City Skyline of Hong Kong



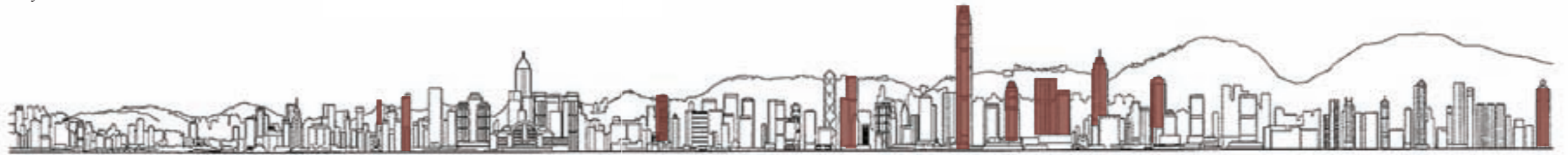
B Preservation of View Corridors to Ridgelines against the 20% Building Free Zone



C Existing Terraced Arrangement of Buildings



Skyline 1997



Skyline 2007



sources  
 - Stadt Bauwelt 175, Thema Hongkong, p.53  
 - www.zyvex.com (28.02.2008)  
 - www.urisa.org/files/Makvol17no1-4.pdf (01.03.2008)