

Skylines and Cityscape

Urban Planning for the 21st Century

By Anna Brown

Skylines are highly personal. Whether dreaming spires or thrusting towers, everyone has a favourite city skyline, and indeed a favourite viewpoint – necessarily some place outside the frame. Picture postcard Oxford from the bottom of Christ Church meadows. Manhattan from New Jersey. Alter a much-loved skyline, through destruction or addition and the outcry is huge. In this article, Anna Brown traces the moving skylines of London, New York and Shanghai, and explores the urban planning approach taken by the world's most successful cities.

A transforming skyline signals civic success writ large. Shanghai is the new New York. Canary Wharf is the new City of London. The Freedom Tower is the new World Trade Center.

The much-discussed St Paul's viewing corridors, protected forever amidst London's newly volatile airspace, reflect a city managing an element of its brand identity from beyond the grave.

Ken Livingstone is extremely conscious of the opportunity for London's changing skyline to reflect and memorialise its emerging role as the dominant city of the West. He aspires for London in 2010 to be as New York was in the 1950s and 1960s: the hub and home both of business and culture, prosperous and forward looking.

Uniquely among Europe's capital cities, London is growing. The population is projected to rise by 800,000 in the period to 2016, to 8.1 million. The Mayor's London Plan (published in full in February) is based on projected demand for 311,000 new homes.

Livingstone's vision for London's renaissance is founded on his parallel with New York and also on the thinking of architect Richard Rogers, Chair of the Mayor's Urban Task Force, who helped to create the Architecture and Urbanism Unit within the Greater London Authority.

The Mayor is committed to accommodating economic and

population growth within the city's current boundaries without erosion of open land. Research estimates that available sites can accommodate 240,000 new homes – so there is a space shortage, even before taking into account the new businesses, schools, supermarkets and so on which will serve and employ London's new population.

Increasing density of development, and raising height, are essential techniques. The Architecture and Urbanism Unit aims to support the development of new urban quarters on brownfield sites, as well as helping to develop and sustain London's 'Green Grid' – the network of open spaces (green, blue and grey) across the city. The focus of the 'A + UU' is on achieving the highest quality architecture and urban design in London, and their remit includes advocacy for tall buildings generally, and for specific projects by important architects.

Overall, the Mayor has made clear that dense, tall development will be promoted where it is most desirable and can be achieved in the most sustainable way. Key to sustainable development is linking transport interchanges with office and residential provision. This prioritises mixed-use development, and presents remarkable new sites for experimentation by architects and masterplanners.

The London Plan identifies a series of Opportunity Areas, each of which can typically accommodate at least 5000 jobs or 2500 homes or a mix of the two, together with appropriate provision for shops, leisure facilities and schools. These include both brownfield sites and places with potential for significant increases in density (i.e. the possibility of height). The latter include several sites in Central London: White City, Paddington, King's Cross, Waterloo, Vauxhall, Elephant & Castle, London Bridge. Several of these are masterplan areas currently in development.

A smattering of Opportunity Areas in the West, North and South are joined by a dozen in East London, explicitly the priority for daring new development. The 'Thames Gateway' (stretching east from the City of London) represents London's major development opportunity – perhaps



Future designs for Canary Wharf



Elephant and Castle Masterplan, Foster and Partners

the most significant opportunity in Europe. And, in key areas such as Canary Wharf, building high is part of the challenge and the solution.

When One Canada Square was completed in 1991, it heralded the future. Designed by Cesar Pelli at 237 metres, it dwarfed the City's tallest building, NatWest Tower 42 (see Peter Murray's article in this issue on the City skyline). One Canada Square opens up the Thames Gateway and establishes that London is moving east. It also fought the initial battles about London's skyline, in the face of loud condemnation from some quarters, and the dreadful accusation of Americanisation.

Despite early difficult years and receivership, the gamble of Canary Wharf has paid off, and it ensures the dominance of London's financial and business services sector and the aspiration for its future growth – attracting corporate occupiers and their workforce, both suited to life in the sky. A city growing at the top as well as the bottom of the social spectrum, of demographic profiles, and of architecture and urban design. Vertical growth has now been accepted, and the debate ranges on about exactly how and where, but the glass ceiling has been punctured and essentially dissolved.

The debate moves on to quality of design – always a subjective judgement but no less an important one, given the symbolic power of the skyline – and the effect of a tall building on its immediate environment, on wider environmental issues and on the people who live and work in it.

Significant progress is being made in areas like energy consumption. The Swiss Re Tower, recently added to the City skyline, was designed by Foster and Partners using virtual prototypes to test out wind resistance and other environmental criteria. This is next generation design, establishing that a focus on the skyline does not mean sacrificing what happens at ground level or within the building.

Another element of the London Plan which is bound to provoke much discussion is the target of 50% affordable housing. Tall residential buildings can help, by creating more value per square foot on the ground to leverage against multiples in the sky.

Residential proposals such as the Marks Barfield Skyhouse can 'afford' to allocate a third of its units as key worker housing. This formula will become even more important as projected population growth puts even greater pressure on London's underpaid but essential human infrastructure: teachers, nurses, firemen et al. Environmental design and the creation of public open spaces for residents and workers within the vertical structure support this holistic approach.

The most far-reaching of the proposed London high-rise projects concern the redevelopment and densification of areas focused



One Canada Square, John S. Miller



London skyline, courtesy of WORDSEARCH

around major transportation nodes. For example, Foster and Partners' Elephant and Castle masterplan aims to reinforce this significant transport interchange as one of London's important urban nodes. A key part of the strategy is the general densification of the area, involving several tall buildings housing a mix of uses.

It also implies drawing London's skyline south of the river, as will the London Bridge Tower by Renzo Piano, recently granted planning permission. It is the second highest planned building in Europe and will dominate the skyline from an entirely new perspective. The beautiful 'shard of glass' shape will literally raise the profile of the south bank and its now well developed 'strip' of important cultural buildings. Of course it will also create a platform from which to view the growth of 21st century London – upwards and especially to the east – whilst creating a new viewpoint for the tall buildings of London's heritage.

Where domes and minarets used to compete, now 21st century technology and aesthetics propel us into the sky

encased in glass and metal. Cities self-consciously in their heyday build tall, and then taller.

The symbolic power of the New York skyline is nowhere more evident than Manhattan, where the destruction of the once derided World Trade Center has created a gaping hole and a fraught public debate about architecture. The roles and requirements of property developers, architects, governments and 'the public' have never been more complicated by financial, political and human concerns.

Initial public consultation formed key parts of a brief for the architectural competition: essentially people wanted to see tall building(s) on the 16 acre site, but empty spaces where the twin towers stood. The successful design by Studio Daniel Libeskind clusters several angular buildings of different size and height around Ground Zero. The tallest – Freedom Tower – reaches 1776 feet into the air, a patriotic statement for America and a pinnacle for the New York skyline.

The aftermath of the competition has been difficult.



Under the brief of property developer Larry Silverstein, Libeskind's conceptual design for the Freedom Tower at the World Trade Center site has been refined by David Childs of SOM. Critics, such as civic group Rebuild Downtown Our Town (R.Dot), believe that this amounts to a radical, and unacceptable, alteration of the Libeskind design.

Libeskind himself recently went on the record saying, 'We are not on the same wavelength. They are the biggest corporation of architecture in the world. We have a very different agenda. I believe in the cultural aspect of architecture and that it should be about linking up with all sorts of other issues not just wedded to steel and glass.'

The controversy focuses on the mix of uses on the site and particularly the quantum of office space required by Silverstein to replace what was lost. Some critics feel that even the schemes developed under the auspices of the competition were not right to meet the current needs of Lower Manhattan.

Unquestionably, New York needs to fill the gap in its skyline. One could argue that the symbolic power of rebuilding will generate its own market, bringing businesses back to Manhattan by renewing their faith in the city's ability to grow.

We talk about cities as if they are alive – or indeed as if they are dead or dying. Would you rather locate in a living city or a dying one?

What does New York need to do? Rebuild, replace, reiterate that the city is alive and growing. That the damage to its very grown-up skyline can be repaired rather than signalling the beginning of the end, the crumbling of the empire. Will it succeed? We'll see.

For the most part, North America is being left behind, as is continental Europe. With the important exception of Berlin, the old capitals are frozen. Populations are declining and the skyline is fixed in place. Globalisation is leaving these cities behind: their future is in heritage tourism.

Look east and the rise of cities is happening on a far greater



World Trade Center project by Studio Daniel Libeskind

scale: less concerned with preserving the past, more caught up in the rising tide of urbanisation, many Asian cities are struggling to cope with rapid population and economic growth. Hong Kong has the highest population density in the world with nearly 100,000 people in each of its 60 square kilometres. Hong Kong is the tallest city in the world by a huge margin.

In less than a decade Shanghai has seen the construction of over one thousand skyscrapers. When the city plan keeps changing at an astonishing speed, people can't help getting lost.

The purpose of Shanghai's rebuilding is clearly to create the preeminent city of Asia. Besides the 1000 skyscrapers, a subway line, highway overpasses, bridges and tunnels have been constructed and more is to follow. It is hard to imagine that just a few years ago in the centre of today's modern Shanghai, there were just rice paddies and primitive villages.

Pudong, the new financial district of Shanghai, houses the most impressive skyscrapers in China. The tallest, Jin Mao Tower, soars up to 480 metres and is also the third largest building in the world, after Petronas Towers in Kuala Lumpur, Malaysia and Sears Tower in Chicago. At first sight, the Jin Mao Tower appears reminiscent of the Empire State building, which also reflects the long-lasting affair between Shanghai and the West.



World Trade Center, David Sundeberg/ESTO

The Chinese government has been criticized for its tabula rasa approach to city planning, for not taking adequate care to preserve the old as it builds the new. However the Chinese tradition is not completely forgotten. The shape of the new Shanghai Museum is designed to resemble an antique Chinese bronze vessel, and the Jin Mao Tower design is actually based on the form of ancient pagodas. There are also some pockets of old town districts and architecturally significant buildings which have been restored, such as the Hong Kong and Shanghai Bank building from 1925.

The most ambitious new project under planning is undoubtedly the World Financial Center designed by Kohn Pedersen Fox. The immense square based tower will rise up to 95 floors or approximately to 500 metres. At the sharp edged top there will be an immense circular cutout of approximately 50 metres, providing relief from the pressure of the wind and occasional storms. Once completed it will be the tallest building in the world - unless someone else has already managed to build something higher.



Hong Kong and Shanghai Bank Building, Ian Lambot

Hong Kong, Sydney, Jakarta, Kuala Lumpur, Bangkok, Singapore. The world's great urban planning challenges are being met in the sky by these rapidly growing cities. Mixed-use skyscrapers, with new sustainable building techniques which try to preserve both their environments and their occupiers, are asserting the successful cities of the new century. London is looking east.

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World Trade Center project by Studio Daniel Libeskind

