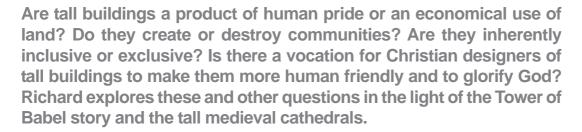
Building Tall: From Babel to Burj Khalifa

by Richard Higginson



During the last year I have been privileged to visit the three great Chinese cities of Hong Kong, Shanghai and Guangzhou. Different though they are, all have something important in common: a profusion of very tall buildings. In fact, each city boasts two of the tallest 13 buildings in the world at the time of writing. The list changes every month as one soaring design after another in the Far East and Middle East reaches completion.

A week before Christmas, I stood at the foot of the 437.5 metre International Finance Center in Guangzhou (currently the eighth



International Finance Center in Guangzhou

tallest in the world), craning my neck to see the top of the building. I have to admit that I was impressed. The slightly curved building exudes a sleek beauty. On a boat trip the previous evening, I had enjoyed the kaleidoscopic colours of the 600 metre Canton TV observational tower, which lights up spectacularly in the darkness. Towers, incidentally, occupy a separate category from habitable buildings, and have their own pecking order. The Canton tower briefly held the title of world's tallest, but has already been overtaken by the Tokyo Sky Tree television tower.

Dwarfing all other buildings in any category is Dubai's Burj Khalifa: an incredible 828 metres, with a staggered design which becomes slimmer and slimmer the higher you go. However, this too is likely to be eclipsed by 2015 as Saudi Arabia is set to start on the Kingdom Tower, a building no less than a kilometre high. Talal Al Maiman, board member of investment firm Kingdom Holding Co., is reported as saying 'We intend Kingdom Tower to become both an economic engine and a proud symbol of the Kingdom's economic and cultural stature in the world community. We envision Kingdom Tower as a new iconic maker of Jeddah's historic importance as the traditional gateway to the holy city of Mecca."



Towers of Babel?

Reading this quotation confirmed an unease that I've been feeling for some time about this mania for tall buildings. Are there not clear echoes here of the ancient biblical story of the Tower of Babel? The people of Genesis 11 – mysterious people who had migrated



Ancient ziggurat at Ali US Air Base in Iraq

from the east - said to one another 'Come, let us build ourselves a city, and a tower with its top in the heavens, and let us make a name for ourselves...' Today's tower-builders seem equally keen to make a name for themselves. Pride, a yearning for fame and the desire to satisfy civic, national or even religious ego are evident in statements such as Talal Al Maiman's. Calling the proposed new building Kingdom Tower is doubtless intended to flaunt its provenance in the kingdom of Saudi Arabia. But the choice of name looks decidedly provocative in the light of the psalmist's assertion that 'The Lord is king'. Psalms 93 and 97, both of which begin on that note, make salutary reading for any aspiring tower-builders.

It is interesting that the tower-builders of Genesis 11 were fuelled by a concern that 'otherwise we shall be scattered abroad upon the face of the whole earth'. It is difficult to fully grasp their motivation, but they seem to have suffered from a nagging insecurity which led them to make an aggressive assertion of unity in a prestige-seeking project. The competitive streak in today's tower-builders demonstrates the disunity or scattering which was imparted by God's judgment on the people of Babel. Tokyo wishes to go one better than Guangzhou; Saudi Arabia wants to steal a march on Dubai. The speed with which these buildings are being constructed and records being broken is starting to look like a foolish and expensive game of national and urban one-upmanship. There is now talk about building a tower one mile high. When and where is it going to end?

It's fascinating too that God's judgment took the form of 'scattering' rather than the physical destruction of the tower of Babel. Presumably, however, the tower was left unfinished, because the result of linguistic confusion was that the people 'left off building the city'. It may be that the ziggurats, the surviving temple-towers of ancient Babylon give some indication of what they had in mind. Nowadays we have learnt to translate each other's languages, but we still use language divisively. While Talal Al Maiman's boast may inspire Saudi Arabians, it is calculated to provoke other nationalities.

Does God feel the same way about the Kingdom Tower, the Burj Khalifa and the



Burj Khalifa, Dubai

World Financial Centre in Shanghai as he did about the tower of Babel? Very possibly. Similar motives of communal aggrandisement appear to lie behind both types of project, ancient and modern. Yet we must be wary of being over-sure that we know the mind of God. Before dismissing today's tall buildings as nothing but a monument to human hubris, we need to delve deeper into the topic.

Cathedral Builders

Tall buildings are not a recent innovation – simply the scale of them. In the medieval period, the tall buildings that must have appeared similarly breathtaking were the great cathedrals of western Europe. They dominated city skylines and were often visible from miles around. On a clear day you can still see the outline of Ely Cathedral twenty miles south. Ulm is the tallest cathedral in Europe (530 feet); its spires were originally intended to be shorter, but they were increased to outdo those of Cologne Cathedral (516 feet). Cologne briefly held the title of tallest building in the world from 1880 to 1884, before Ulm Cathedral was finally completed. Competitiveness can clearly affect ecclesiastical builders as well!

In the building of cathedrals, many different types of master craftsmen were involved: quarrymen, sculptors, stonemasons, blacksmiths, glassmakers, carpenters and roofers. It was an opportunity for them to show their talents.

Indeed, many worked to such high standards that they took immaculate care over small statues at great heights that no-one was likely to inspect at close quarters. Yes, a very real motive for building was the glory of God, the intricate stonework, the pointed arches and the vaulted roofs being intended to honour God and inspire people to lift up their eyes and worship him. But they were also downto-earth construction projects in which local communities and particular individuals must have taken considerable pride. Motivation was mixed, and the same is probably true of many major building projects today.

Towering Danger

Salisbury has the tallest spire among English cathedrals (404 feet), but for a couple of centuries it was outshone by Lincoln Cathedral, which was the world's tallest building from 1311 to 1549, when its spire collapsed in a storm. Old St Paul's Cathedral also had an impressive spire reaching 493 feet, but that was destroyed by lightning in 1561 and then the whole cathedral obliterated by fire in 1666. Do we regard these storms that reduced the height of these wonderful buildings as acts of divine judgment? Probably not. We are more inclined to see them as examples of extreme weather that devastate everything in their path. God doesn't seem to give churches and cathedrals



Salisbury Cathedral

special protection. Christchurch Cathedral was hit along with other tall buildings around it in the 2011 earthquake in New Zealand. But with technological advancement cathedral spires are less likely to collapse than previously, because they are now crowned with lightning conductors.

Today's super-tall buildings raise questions about safety. I was disturbed to learn that Shanghai, which is built on swamp land, is slowly sinking, at the rate of about half an inch a year. All the city's high-rise buildings are built with deep concrete piles to support their weight. In fact, up-market modern engineering sets such high safety standards that the world's tallest buildings are highly resistant to the extremes of the elements.



Tokyo Sky Tree under construction

This was demonstrated on 11 March 2011 by the Japanese earthquake which caused older buildings in Tokyo to sway. But it did not cause any damage to the Sky Tree tower, nor any injury to 500 construction workers who were near the top of the structure that day. The tower has a cutting-edge anti-seismic deign which includes pilings that fan out underground like the roots of a tree.²

However, the tower may be posing a danger in other ways. An increase in the number of pedestrian deaths in the Sky Tree vicinity of Tokyo (up from 12 to 41 in one year) has been attributed to drivers being distracted by the height of the tower and failing to concentrate on people crossing the road. Preventative measures in the form of small embedded electric heaters are also being installed to stop snow and ice falling from the upper levels.³ More seriously, the vulnerability of tall buildings to terrorist attack through the hijacking of aeroplanes was vividly illustrated by what happened to the Twin Towers on 9/11.

Why Build the Shard?

The UK has its own spectacular high-rise building in the process of completion: the Shard of Glass which towers above London Bridge on the south bank of the River Thames. At 310 metres it is small compared with Arabian and Chinese counterparts but has already become the tallest building in Europe. In a recent Guardian interview, the Shard's architect Renzo Piano waxed lyrical about the diversity contained in the building. The Shard will consist of 27 floors of offices, three floors of top-class restaurants, an 18floor, five-star Shangri-La Hotel with a spa, and 10 palatial apartments. A four-storey public viewing area is being built, starting on the 68^{th} floor, which will cost around £20 to access. The developer is considering renting out the very highest room on the 78th floor for high-powered conferences and political summits.

The Shard is mainly financed by Qatari investment, but Piano insists that it is not about money. It is about surprise and joy. It is about the way cities should go. They should stop and we should not go beyond the green



The Shard of Glass, London

belt. If you do this by going vertical that sends a message about conserving land. The building is not about arrogance and power but about increasing the density of city life.'4

> The same arguments are used by architects and property developers involved in China's super-tall buildings. The rising cost of land makes building upwards look economically sensible and ecologically sensitive. The designers believe that their creations add to the quality of urban life. The fact that most of the Asian skyscrapers include residential, office, retail and hospitality space is a positive embodiment of a live-work-play ethic. There seems no reason in principle why floors devoted to worship space should not be included too. These super-tall buildings are arguably more user-friendly and a better use of space than the vast, impersonal shopping malls surrounded by acres of desolate parking lots that are characteristic of North America and parts of Europe.

Community and Inclusion

Christians should not discount such arguments too readily. Building tall may represent a wise stewardship of God-given resources. Like most things in life, tall buildings can be done well or badly: they can be beautiful or ugly, a symbol of pride or an expression of joy, dedicated to a single use or agreeably diverse.

But these super-tall buildings still raise two key critical questions. First, does the muchproclaimed diversity actually result in the creation of community? The nature of a highrise building is that different storeys are devoted to different purposes. Where do people come together in their living, playing and working? As they go about their respective business, do they meet only in the ground floor reception or in the lifts? Are the

- 1 'Saudi Arabia takes step to build world's tallest tower', Daily Telegraph, 2 Aug 2011.
- 2 'Tokyo's new tower survives quake to reach full height', Times of Malta, 19 Mar 2011.

Canton TV observational tower

designers into creating genuine communal space? It appears to be low on their list of priorities.

Second, aren't these super-tall buildings essentially the preserve of the rich? The types of facility on offer appear to be beyond the experience and the spending power of poor or modestly paid people who live in their vicinity. The Shard of Glass rises above an area of high unemployment; more than 2000 16- to 24-year-olds in Southwark have no work and are not in education and training. The best that can be said is that the Shard will provide some jobs for them, and that is not be sniffed at. But the rationale for its presence would be stronger if it included facilities that local people wanted to use and could afford to use.

Tall buildings are doubtless here to stay. But what is contained within them may still be 'up for grabs'. I would love to see Christians playing a constructive role in their design and development, thinking deeply and arguing persuasively about the best use of space.

- 'Concerns about ice and snow falling from world's tallest tower', Daily Telegraph, 8 February 2012.
- 'A shot in the arm for London or a symbol of Qatari financial muscle?', The Guardian, 31 December 2011.

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