Talking Tall: So You Want a Tall Building?

Things to Be Considered Before Building Tall



John Worthington

"Long term thinking requires an understanding of the dynamics of development, and as such you need a flexible framework for development, not a blueprint."

An interview with John Worthington (DEGW) by Jan Klerks, CTBUH Communications Manager/Journal Editor

DEGW co-founder John Worthington represents the W in DEGW, an international firm of building designers and strategic consultants. Having devised tall building strategies for Rotterdam, Dublin and London, he is the kind of guy who is called in as cities start to think about adding tall buildings. As such, he has developed a broad expertise and an interesting set of opinions. While in London, I took the opportunity to visit John Worthington in DEGW's UK office and talk about strategic tall building development, in the context of planning, zoning and politics.

Klerks: The title of our upcoming conference in Korea this year poses the question 'Why Tall?' As a strategic planning consultant, why don't you spoil the outcome and tell us, why and when should we build tall buildings?

Worthington: I'm probably not telling you something new when I say that tall buildings from a market perspective reflect the values of competition, individualism, domination and immediate personal gain. From a developer's point of view, tall buildings are all about maximizing the return on a small site. If you can build twelve times what you are allowed,

you get twelve times more return. Greed becomes a critical driver.

From the community perspective, density can provide greater accessibility, amenity and urban vitality. However, increasing density over a large site may not require a tall building in the sense of a tower. Density is a means to improve amenity, which is what the Modern Movement was about. Actually when we say density, what we really mean is diversity and intensity. The classic function of cities is a place of exchange and communication. This requires a mixture of functions, people,



Figure 1. Vancouver is often singled out as a city where tall buildings go hand in hand with well designed and thought through street life © Jan Klerks



Figure 2. The iconic 392-meter (1,286-foot) tall Parkhaventoren in Rotterdam was also denied planning permission because of fear that the project would create an oversupply in the local market © Merwede Group

buildings, spaces and infrastructure. The intensity of the way these come together is not only functional, but can also be desirable (see Figure 1).

Finally, tall buildings can be a means to provide identity. The tower is considered to be an icon and a marker to define a locality and to help us when navigating an area. Then, there is the individual desire of certain users for views, security and anonymity. Some appreciate high-rise living where one can lock the door, hide away, have a view and gain prestige. Whether we want that and whether it makes good cities, is for the community to decide.

Klerks: One of the cities in which you have been active is my former home town of Rotterdam. What is your opinion about the development of tall buildings in this city?

Worthington: Rotterdam is a working city which celebrates tall buildings. It wants to be tall. Tall buildings reflect the city's desire to be modern and innovative. Rotterdam was flattened during the war, and building tall gave the city a pride in being new, and a sense of purpose and power. They were the first European city to build tall.

The trouble was that, though their model was Manhattan, their buildings were Lilliputians in global comparison. They had tiny floor plates to give them the slenderness in height, which is totally uneconomic. I had to temper their enthusiasm for towers. For example, they wanted to build a 250-meter (820-foot) tall building. I was asked where they should put such a building. It was framed as an aesthetic problem.

My response was that this was the wrong

question. There were more interesting problems, and we could dispose of the original problem rapidly. If you are to build the proposed building, it would be a year and a half of your total market demand. Do you honestly want to take all the energy you have spent 40 years since the last war nurturing, and move it away from the street into this private world in the sky? And more importantly, if there is a recession you can't end it by phasing the construction (see Figure 2).

Then we got down to addressing what sort of city they wanted. The issue was about how to manage growth, change and innovation. Building the tallest building for prestige and power is a fools' paradise – building a taller building than the last one means somebody else comes along next and builds an even taller one. However, building an innovative typology will always retain its uniqueness. Norman Foster's Shanghai Bank in Hong Kong and Richard Roger's Lloyds of London are still iconic, though dwarfed by the buildings surrounding them.

Klerks: How different are things in London?

Worthington: The development of Canary Wharf is a good example of a privately driven

development which is typical for the time and place in which it happened. The first large-scale private development plan to transfer this former dockland in East London into a major business district and a financial center was launched in the mid-1980s. In a bold step, they saw the opportunity of dramatically increasing the density from logistical sheds to a city center scale. They persuaded the government to build the tube link to the west end and the Docklands light rail to the city. Today, Canary Wharf is a high-rise cluster that has sufficient critical mass to act as a counterpoint and competitor to The City of London. London also has a policy of protected views of St Paul's Cathedral, which has shaped the distribution of high-rise clusters. The policy produces a map of viewing cones which are required to be preserved through urban planning (see Figure 3). As such, the UK is more characterized by adversarial negotiation rather than by regulatory planning. Elsewhere in Europe, city developers decide what to do and then stick to that decision. This explains why strong individuals can play a more prominent role. In some cities, tall building development is heavily influenced by strong individual leadership. Vancouver had Larry Beasley as the personification of urban development, Chicago has Mayor Richard Daley, and in London, Ken Livingstone as mayor had the final say on building tall.

Klerks: In your opinion, what is a good strategy for the development of tall buildings?

Worthington: In my mind, the two central questions are: "What sort of place do we aspire to?" and "What should the city council do to set the appropriate policy?" I believe that answering these questions is a communal effort in which all motives are

being weighed. On the one hand, we hear the arguments about context, scale, appropriateness and the speed of change; on the other hand, competitiveness, financial returns, iconic value and legacy. A good understanding and a fair valuation of these arguments requires community awareness. It is understandable that developers seek to maximize their profits, but there are also &

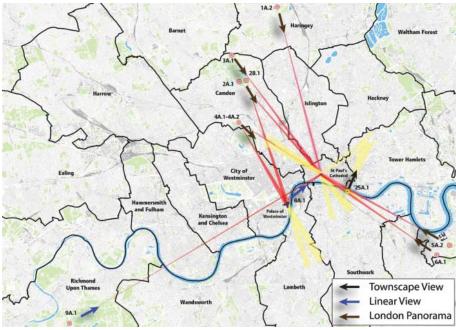


Figure 3. Map showing protected views in London © City of London

the needs and wants of the community (see Figure 4).

A strategy on tall buildings is comprised of more than just an idea on tall buildings, and should be a holistic vision which deals with the sense of place, intensification, infrastructure, and the place you want to be. A good example is the Breitner Center in Amsterdam, where Philips global headquarters has relocated. This is an area where the city meets the countryside, serving as an intersection of infrastructure, and has a good mixture of functions and building sizes. It is also a good example of the city center not being necessarily the only place to develop tall buildings (see Figure 5).

Klerks: How does a strategy translate into planning principles?

Worthington: Tall buildings require a long term strategy. It takes many years to develop and build a skyscraper, and you don't build them to be demolished anytime soon. Long term thinking requires an understanding of the dynamics of development, and as such you need a flexible framework for development, not a blueprint. I would suggest a framework which defines massing, grain and quality, and sets the positioning of

long term infrastructure. It defines a clear sense of direction with a set of criteria, while allowing for change.

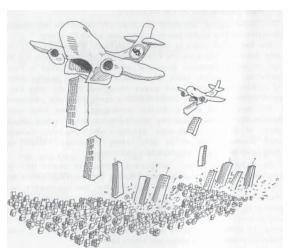
If you are firm about the kind of city you want, then you can define in advance the appropriate exceptions that you are prepared to allow. This is actually a classic British way of doing things, to have rules and then break them by precedent. Perhaps what a city council should be doing is to think less about formulating guidelines and codifying good practice, but instead put more resources into changing perceptions by building an

understanding and awareness of opportunities.

Klerks: How can you steer the dynamics of developments within the framework?

Worthington: Creating a framework in which tall buildings take shape also should incorporate qualitative aspects of development. This is something that is not easy to assess by measurement. Here in the UK we have CABE, the Commission for Architecture and the Built Environment, which is an organization that provides independent and impartial design advice by reviewing proposals for major developments.

After I had completed the tall buildings strategies in both Rotterdam and Dublin, I was asked to chair an advisory committee of experts who could check the quality of a proposed development against the ambitions of the public authorities. In Rotterdam, the group not only consisted of the usual suspects, such as architects and urban planners, but also had an engineer, climatologist, sustainability expert and urban sociologist on board. By discussing developments, we created a process of learning, education and feedback for both the developers and the city (see Figure 6). One aspect we focused on was ground floor usage both around and within the buildings. Too often, developers think they can get away with designing open spaces, representing them as vibrant spaces; but the reality is windy, empty plazas, surrounded by blank



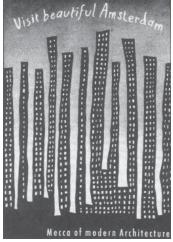


Figure 4. Images used by pressure groups to mock proposed tall building development

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Figure 5. Omval area in Amsterdam, Breitner Center to the left



Figure 6. Former Head of the Urban Planning Department of Rotterdam Riek Bakker (right) discussing developments during a public hearing of the advisory committee

walls at ground floor. We worked hard to make the ground floors accessible with outward looking activities and façades designed to reduce down drafts.

Klerks: What about practical issues of tall building development?

Worthington: Local codes and culture influence tall buildings. In Europe, towers tend to be more slender compared to their American counterparts, because they have stricter labor laws when it comes to daylighting, which make deep spaces uneconomical. Cultural aspects can be found in the usage of the towers. In the United States, a tall building can be a closed fortress, while in Japan it is much more the custom to have a publicly accessible ground floor and top.

Also, when designing tall buildings, you are going to run into issues which require innovative thinking. In some cases, the code needs to be reconsidered or even rewritten and mindsets need to be changed. Tall buildings represent a scale that often requires changing codes, and by so doing, improving the codes. The scale of a tall building means it is of sufficient size to afford experiment and prototyping. Some buildings use tallness to make a point, to represent new ambitions and incorporate the latest advancements. As such, tall buildings can be drivers of innovation

Klerks: One of the timeliest, yet also hard to pin down topics in tall building development is sustainability. Given the

visible presence of tall buildings in the urban landscape, incorporating a message can be an important strategy to set the example, but also as a justification for the height. What do you think is the bottom line for tall buildings and sustainability?

Worthington: For me, sustainability represents an approach that is both holistic and integrative. This goes for cities as well as buildings. The fundamental of a sustainable approach is lean thinking, by wherever possible overlapping functions and stripping out redundancy. However, too precise a fit for each function reduces sustainability, as it leaves no spare capacity for adaptation and change.

Sustainable development begins with the current context of the city and its set of values. The building within its surrounding

neighborhood should be a result of that. Tall buildings can be used as a way to increase density and by so doing reduce the spread of the city, by using a combination of mid-rise buildings, providing street frontages and activities within the podium at the lower level to create vibrant ground floor life, with tall towers being used strategically and sparingly to accentuate a point and increase density. Building tall should be seen in the context of market demand and whether a city can generate sufficient density of street activity to allow functions to be concentrated vertically. Ground and sky levels are of equal importance. Tall buildings, by definition, are going to be exceptional buildings in the urban landscape. It is in the interests of both city and developer to pursue a policy that continuously reinforces an attractive and vibrant city.

...checks and balances

Let Every time there is talk of a new building, we have some form of interference by some group of heritage lobbyists... The checks and balances have gone too far in their favour and restrict the council trying to create jobs and opportunities.

The leader of Liverpool's City Council, Joe Anderson, criticized English Heritage for objecting to the Shanghai Towers, Liverpool development. From "News Society Regeneration Liverpool Council Attacked Over Plan for fifty-story Shanghai Towers", www.quardian.co.uk, February 7, 2011.