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A Tale of Towers and Cities: A Contextual Approach to Vertical Urbanism

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While the ever increasing global interchange of capitals and ideas have created immense opportunities and growth in cities around the world, the physical manifestation of this energy in the urban habitat risks becoming generic in the face of growing global interconnectivity. The role of the public realm between tall buildings and their potential in the creation and accentuation of a local identity that fosters vibrant urban life is a major concern for Henning Larsen Architects, as can be seen in a selection of their works. This is a quality that is diminishing in the increasingly globalized urban habitat. As "global interchanges" increase, the gap between local and global, and buildings and their environs, grows.

The Physical Manifestation of the Global Era

The last three decades have witnessed the rise of the new global era. The liberalization of the financial sector and the nurturing of an investment friendly environment in many parts of the world have allowed an unprecedented flow of global capitals and initiatives that strengthened multinational companies and gave rise to a new class of mobile global elite. Globalization, the prelude to the new global era, has had a significant impact on the built environment. Globalization signifies a trajectory for nations from around the world merging to a common global destiny. Contrary to the implied aspiration, globalization has been a one way flow and adaptation of values from the west to the rest of the world. In simple

terms, developments around the world were made to appear Western (global). The tall building, a modern typology and a perceived symbol of progress, appears homogeneously "global."

The subsequent new global era exacerbated the process of homogenization even further. Whole new business friendly urban quarters began to appear in emerging cities as well as established ones. The clustering of landmark towers amongst shinny glass-walled office blocks became the sign post of choice for any global trading city. In order to strengthen tax revenue, global cities compete to attract large footloose multinational corporations and the ever increasing number of ultra wealthy global elites to relocate. Both established and aspiring cities embrace the anonymous



Opposite: Hong Kong Central Library, which features a Western-style edifice. Source: Henning Larsens Architects Bottom: Pangu 7 Star Hotel in Beijing, with a deserted urban habitat. Source: Henning Larsens Architects



global expression to create class A office buildings, condos, and urban districts to make global corporations and international elites feel at home.

One notable example of a global urban district is Canary Wharf (1987-present) in London. The deregulation of the UK financial markets in 1986 prompted large scale investments and establishment of presence by the major financial institutions from the United States who speculated London would become a global financial center in light of deregulations and the city's advantageous time zone that bridges Asia and the United States (Adam 2012). Coupled with tax exemption, a building boom was created. There were no building stocks in London at the time that resembled the American high-rise typology which American financial institutions were accustomed to. With North American clients came North American developers, and with them, North American architects. Many well established American architectural practices opened their first ever foreign branches in London to deliver American style tall office buildings to their American clients and later, increasingly to domestic clients (Adam 2012).

The biggest impact of global anonymity on the urban habitat is arguably the deterioration of the public realm between tall buildings. Signature towers rise in mute isolation from each other and from the often cosmetically paved and planted residual space that does not serve any meaningful purpose other than to comply with fire regulations. The street, a staple of urban place making, disintegrates due to lack of meaningful containments. The resultant urban habitat becomes so worryingly "bland" that any sense of belonging and civic pride the inhabitant can identify with evaporates.

How did anonymity, encapsulated in global tall building developments, become the prevalent expression for a global city? Is there an alternative to the established perception? To understand the state of affairs of the global urban habitat, it is instrumental to examine this question from "the other side," in both geographical and ideological terms.

The Origin of Tall Told From the Other Side

It is commonly acknowledged that the tall building typology is a very American invention, made possible by the innovation

of vertical transport technology and steel frame construction that materialised in America. One of the first tall buildings in the world that is commonly acknowledged to encompass the essence of this new typology is Louis Sullivan's Wainwright Building (1890-1891) in St. Louis, Missouri. Despite his reluctance in departing from the use of ornaments, the Wainwright Building is considered one of the very first significant buildings in the world to embrace modernism on the premises of the design doctrine "form follows function."

The tall building typology is very much an archetypal product of the modernist movement. There is no shortage of contemporary socio-economic explanations and financial justifications on why the tall building typology exists. There is, however, very little explanation on how this typology came to being in light of the once celebrated and subsequently discredited modernism.

Modernism Devoid of Context

Although tall spires and clock towers have always been part of the European urban fabric, it is commonly accepted that Europe did not begin experimenting with tall Bottom: Wainwright Building (1890-1891), St. Louis, Missouri by Louis Sullivan, one of the first tall buildings.
Source: Henning Larsens Architects

Opposite: La Muette, a very modern achievement for its time in the 1930s. Source: Henning Larsens Architects



buildings until the 1950's. This is of course not entirely true. Boerentoren (affectionately nicknamed "Farmers' Tower"), is a tall office building in Antwerp, Belgium, constructed between 1929 and 1932. Constructed with the newly imported steel-frame technology, the building originally stood 87.5 meters tall, adorned with Art Deco motifs. Despite its grandeur as a financial landmark in Antwerp, its nickname signifies an egalitarian spin as farmers were the majority share owners of the bank that presided at the landmark.

Egalitarianism is in fact the social agenda of the time during the interwar period "across the pond" in Europe. It is also one of the fundamental building blocks of the modernist movement that flourished during the interwar period. The modernist movement is a very broad term that encapsulates the societal change and technological evolution of the time. In the built environment, it attempted to reconcile the principles underlying architectural design with rapid technological advancement and the modernization of the society. In very simplistic and reductive terms, it envisions a utopian society where everyone is equal and the physical manifestation of this society was best expressed through industrialisation and mass fabrication. The leading figure of that period, Walter Gropius, and many of his contemporaries championed the aesthetics of the machine-produced good. They not only promoted standardization as the precondition for efficient factory-based production, but also cultivated a particular formal language that, for its advocates, embodied the spirit of industrialization: raw materials, geometrical shapes, and lack of ornamentation. The Swiss architect Hannes Meyer (1889-1954), Gropius' successor as director of the Bauhaus proclaimed that standardization was "the alphabet of socialist architecture" and most appropriate for a society without class differences (Urban 2012). Taking "form follows function" to the extreme, Meyer believed that buildings' expression should be exclusively

determined by their function. For him, a building was "neither beautiful nor ugly, just right or wrong" (Urban 2012).

The creation of the modern tall building typology began in Europe on a different footing. Instead of a reaction to the market economy that saw Chicago and New York building tall to supply the demand of quality office spaces in prime locations for professionals and corporations, the European tall building typology was created to mass supply quality housing for the working class. In Germany and France, architects such as Mies van der Rohe (1886-1969) and Le Corbusier (1887-1965) realized that traditional construction was not able to generate the output required by massive country-to-city migration and disregarded the obsolete

building methods. Supported by seductive images, they propagated standardized construction as both superior technology and signifier for modern egalitarian life. The mandate for industrialization subsequently paved way for the mandate for building high blocks supported by scientific calculations. According to Gropius, the ratio between the amount of dwelling space and intensity of natural light was best in an eight to 12 story building (Gropius 1934).

The period of the 1930's witnessed the advent of high-rise housing. One notable example of the attempt in creating a tall egalitarian housing complex in the spirit of industrial standardization was La Muette (1932-1936) in Drancy, a short distance east of Paris, by French architects Marcel Lods (1891-

1978) and Eugene Beaudouin (1898-1983). Regarded as one of the most significant and technically advanced housing projects of the 20th century, La Muette was conceived as a cite-jardin (garden city) development incorporating the prevalent principles of the time that championed community, green belt planning, and an emphasis on freestanding high-rise building. Sited in an open area at the edge of the city, La Muette consisted of 16-story towers and three- to five-story blocks, and incorporated the latest advanced system of factory-made elements.

High blocks and standardized components became a symbol for a progressive modern society. To the modernists, La Muette, destined to be one of the first ground-breaking social housing in France,





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encapsulated the essence of the egalitarian utopia that modernist architecture strived to nurture. The forward looking optimism enshrined in the tallest housing blocks at the time proved to be short-lived. Not long after completion, Paris succumbed to Nazi invasion and the complex was vacated for military use (Housing Prototypes 2002). Ironically, in a strange twist of fate, the same modernist expression for progress and humanity was deemed suitable by the Nazi occupiers to convert La Muette to an interim prison for Parisian Jews before they were deported to concentration camps (Housing Prototypes 2002). After years of abuse and neglect, the towers were destroyed by the authorites after the war. The open green space rigorously framed by the towers and the blocks was envisioned to be sunlit and blissful. Instead, it ended up being a roundup arena for the condemned. The clinical and reductive pragmatism and universal anonymity of the modernist expression suddenly became palpable in its blind interchangeability between a signifier of progress and a medium for inhumanity as in the case of La Muette.

The Global Embrace of the New Aesthetics

Meanwhile across the Atlantic in the United States, the modernist expression was breathing new life in the design of tall office buildings. Amidst the chaos in the build up to the Second World War, many leading modernist architects from Europe migrated to the United States. Many took up prestigious posts in teaching the modernist philosophy at established institutions and a whole new generation of

influential American modernists were born; modernism became a prestigious pursuit. Standardization and its embodied aesthetics, the architectural language of the people, had been adopted by the corporate world.

One of the most representative of the modernist tall buildings is arguably the Seagram Building in New York (1954-1958) by Ludwig Mies van der Rhoe in collaboration with Philip Johnson. Widely recognized as one of the finest example of "less is more," the Seagram Building is the embodiment of the modernist movement's reductive utilitarianism. Ironically, it was the world's most expensive tall building at the time of its completion. Characteristic of the modernist high-rise typology, the building is set back from Park Avenue by a large open plaza to create an open urban space, a very rare move at the time in New York. Nonetheless, it remains a monumental statement rather than a meaningful public realm. Undeniably a classic work of art in its own right, the Seagram Building also epitomises the modernist approach of imposing the dogmatic, universal, global models and disregarding the environmental particularity, the social individuality, and the cultural uniqueness of the places in which buildings were constructed (Lefaivre & Tzonis 2012).

Fast forward to the global era, and many characteristics of the Seagram Building are still visible today in new developments. The advent of computer aided design has given rise to a new generation of sculptural forms; having once yielded uniqueness amongst the rational rectilinear extrusions,

they themselves have become ubiquitous and anonymous. With all due fairness, this universal expression of anonymity does, in some ways, encompass virtues of the global era that include transparency and accessibility (Delanty & Jones 2002); and in extension to this a belief that by creating new urban images and new types of public space, spatial membership could be offered to all individuals and cultures of the society (Gospodini 2002). This socialistic aspiration has never quite come to fruition in the global era, in part due to the constant need to attract multinational corporations and global elites by creating grandeur and pomposity in the form of extreme height and landmark icons. With grandeur and pomposity come exclusivity and segregation.

The Contextual Approach and the Urban Habitat

The critique of modern vertical urbanism being universal and anonymous stems from the tendency of tall buildings to be conceived as stand alone objects detached from their surroundings. If the modernist approach disconnects the building from its context by forcibly imposing an abstract order on the locality of which the building is erected, in response, the contextual approach seeks to re-connect the building back to its urban setting to consolidate a coherent whole. The public realm plays a key role in this approach. By re-establishing the relationship between private and public, local and global, the design of the building and its urban habitat thus relies on (and responds to) its context, be it social, cultural, environmental, or



physical. This approach is to be explored by considering built and proposed work by Henning Larsen Architects: Gothenburg City Gate, a 40,000-squaremeter speculative office development in the Swedish city of Gothenburg; Villas in the Sky, a 41,000-square-meter mixed-used development in the heart of King Abdullah Financial District in the Saudi capital, Riyadh; Crystal Towers, a 100,000-square-meter speculative office development in the heart of King Abdullah Financial District; Toronto Master Plan, a 1,000,000-squaremeter mixed-use development in an undisclosed location in Toronto; and finally, the 2,000,000-square-meter King Abdullah Financial District also in Riyadh.

Identity of the Public Realm

Picking up where modernism left behind, Scandinavia had renewed the pursuit for egalitarianism amidst the ashes of the Second World War. Denmark, Henning Larsen Architects' home base, is a country famed for happiness and equality. These attributes are very often manifested and reinforced by the relationship between the individual and the public realm. Danish people identify intimately with the public

space, it is often perceived as an extension of their work space and play space, and vice versa. If landmarks and icons produce recognizable sign posts at a global scale, an animated public space between buildings creates the local identity; and it is this identity that the inhabitant associates him or herself with on a daily basis.

Accessibility, both physical and notional, is a key determinant in the success of a public space. The consolidation of the egalitarian vision in the 1960's Denmark led to a series of legislative reforms that gave focus on the well beings of the individual, with many manifested in spatial terms. One of which is the right for every single worker in a permanent workspace must have access to daylight and view to the outside world. This principle was adherently applied in the design of Gothenburg City Gate in Sweden, despite the fact that there is no such workspace requirement in Sweden. The result is a maximum nine-meter lease span that gives the "third row" a decent access to light and view. By limiting the height of the development, the central service core remains relatively compact, thus yielding a small yet effective floor plate. The limitation of height prompts the introduction of a midrise building in order to achieve the required gross floor area. Working in tandem, the two buildings form a physical barrier to mitigate the traffic noise from the nearby expressway, at the same time doubling as a relief channel to divert a significant proportion of the prevailing wind through and between the two buildings to relieve the ground plane from the discomfort of down wash and turbulence. The decision to split the tower into two was also contextually driven. The two buildings form a trio with an existing tall building to create an urban cluster, which in turn demarcates a "courtyard" oriented to receive maximum exposure to the sun. This courtyard, contained by retail amenities and civic functions, is envisioned to function as an urban node accommodating daily rituals and spontaneous activities that can be observed by, and related to, the workers on the office floors who are all afforded with direct access to a view.

These design decision were made with the conscience of "build tall, give back", a notion that once the machine that makes the land pay has served its purpose, it then commits itself in making a better urban habitat. A

Opposite: Gothenburg City Gate, courtyard.
Source: Henning Larsens Architects
Bottom: Retail mall proposal in Toronto, public realm with an identity. Source: Henning Larsens Architects

better urban habitat will in turn increase the quality and the value of the real estate. Microclimate, despite its environmental connotation, has a social dimension as well as a significant influence on the success of the public realm. As demonstrated in Gothenburg City Gate, the local climate and the prevailing site conditions form an integral part of a coherent urban scheme. A local high street will not flourish in constant shade (if you are in North Atlantic countries) or exposed to uncontrolled turbulence.

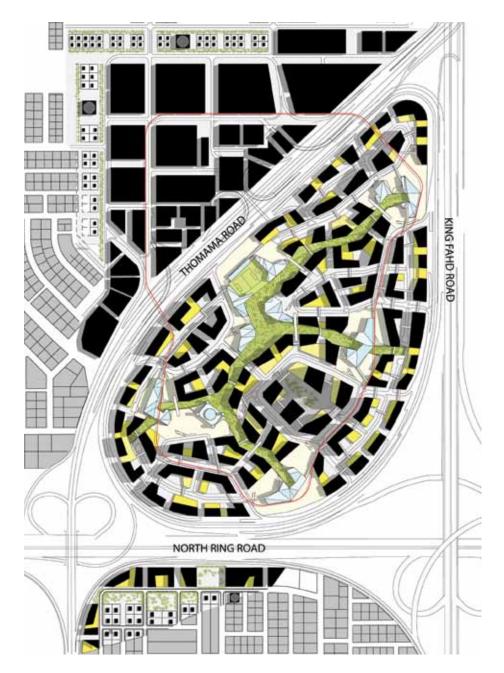
The Canadian metropolis Toronto experiences a wide range of temperature from +30°C to -20°C, wind chills in winter often makes it feel like -30°C. For the urban realm to thrive, Torontonians have long resorted to linked malls and thoroughfares above and below ground. Toronto Master Plan, a proposal for a new urban district at an undisclosed location, challenges the established model. Destined to be one of the major hubs on the edge of downtown, the master plan scheme provides 700,000 m² of office space, 100,000 m² of civic functions, and 200,000 m² of retail amenities. The development is to be integrated with a key transportation interchange that overlaps with an existing bicycle network frequented by local residents. The sheer quantum of the office component calls for a series of mid-rise to high-rise buildings. These buildings are suitably used as wind barriers placed around a giant courtyard. The heights of these buildings are organized to form a "hill" to channel the prevailing wind over and around the cluster to mitigate wind chill on the ground during the winter season, thus providing a basis for creating a tolerable outdoor environment in the central courtyard. To make urban life habitable in winter, much of its activities will have to take place indoor; the retail mall, occupying much of the central courtyard, therefore doubles as a public realm. Within it, smaller courtyards can be found spreading across its footprint. These courtyards within a courtyard provide secondary protection from the elements and have a substantial effect in increasing

the perceived temperature to a level where inhabitants can feel comfortable being outdoors. To add an extra dimension to these courtyards beyond their potential for cafes and playgrounds, they also serve as connecting points to a segment of the city-wide bicycle and pedestrian path that transverses above and penetrates through the retail mall. The blurring of indoor and outdoor, as well as public and private, reinterprets the established model of malls and galleries; it creates a unique experience and fosters a distinct identity for the neighborhood based on its context.

Genius Loci

Cultural references can be a potent tool for establishing the identity of the public realm if used carefully. Cosmetic application of ethnic motifs could easily result in banality and kitsch, therefore it is vital to appreciate and consolidate the genius loci (the spirit of the place) of the site and its environs. The design of the King Abdullah Financial District (KAFD) and its two selected buildings simultaneously exploits the cultural references of the region as well as the geographical features of the site. Situated on the periphery of downtown Riyadh, Saudi Arabia, the multi-phased mixeduse development comprises 30-plus tall buildings and sizable amenities. Despite its high density, 30% of the master plan area has been reserved for pedestrian only public space. The "wadi," as it is known, is a network of passages framed by the closely clustered buildings to provide desirable shade in the hot desert environment. It took its cue from





a special geographical feature found in the region formed by flowing water resulted from very infrequent and yet very heavy rainfall. When such an event occurs, a wadi is then transformed into an intermittent river that turns its path into a flowing oasis. The urban wadi of KAFD is dotted with sustainable vegetation contained by a variety of amenities and destinations; it owes its inspiration and its locality to an existing but eroded wadi on the site. Besides its spiritual symbolism and its function as an urban artery, the urban wadi also fulfils the physical function of its predecessor as a surface rain water relief course. Furthermore, the combined strategy of shading and breeze channelling from the coordinated placements of the 30-plus tall buildings has the effect of reducing the outdoor temperature on the wadi by up to 8°C, making it a viable urban habitat.

An urban habitat is by no means complete without its buildings. Buildings, and tall buildings in particular, play a key role in the viability and the economic sustainability of an urban district. Apart from creating value for the real estate and securing investments to improve the fabric of the urban realm, tall buildings have unique potential in defining



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the character of an urban district. Whilst observing the typological requirements and adhering to the key market indices, Crystal Towers and Villas in the Sky, both situated in the heart of KAFD, attempt to reflect the narrative of its locality and its regional identity by their volumetric expressions and façade treatments.

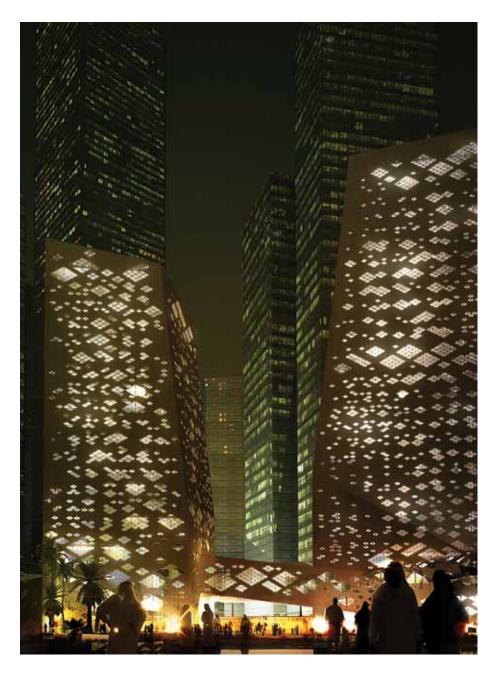
Villas in the Sky rises as a rational rectilinear office block that "grows" like a desert plant into an expressive organic volume that accommodates premium residential units. At close range, it appears no different from any glass clad corporate buildings; viewed at a distance from nearby office floors, however, the "villas" in the sky become translucent and become a bright solid mass. This effect is created by tilted façade modules topped with a stone finish, primarily to reduce heat gain from the desert sun as well as preserving privacy from taller buildings in the vicinity. Deviating from the notion of fostering an identity on the ground, the expression creates a dialogue amongst the inhabitants in the sky.

The site of Crystal Towers presents an opportunity to consolidate the narrative of the wadi. Situated at the threshold to the

Opposite Top: King Abdullah Financial District, site plan. Source: Henning Larsens Architects

Opposite Bottom: King Abdullah Financial District under construction. Source: Henning Larsens Architects

Right: Villas in the Sky viewed from above. Source: Andrew A. Shenouda



Financial Plaza, the pure office program is divided in mid-rise and high-rise blocks conjoined by an elevated podium to provide shade and to demarcate the site's prominence as a gateway to the Financial Plaza from the wadi. The crystalline volumes anchor themselves on the notional bank of the wadi and, metaphorically eroded by the passage of water, this narrative is reinforced by the random crystalline fenestration of the two towers. The controlled randomness of these crystallized openings plays an integral part in reducing heat gain by reducing the amount of glazing on the surfaces that receive maximum sunlight while compensating the loss of natural light by increasing the density of the glazing on the remaining surfaces.

Crystal Towers are one of the very few stoneclad buildings in the KAFD, and indeed one of the very few contemporary stone-clad tall buildings in the world. The pale stone panels effectively reduce solar gain and eliminate the need for frequent cleaning as in the case with most glass-clad buildings in the region. Deviating from the prevalent expression of a global business address in the form of an anonymous glass container, the Crystal Towers attempt to reconcile regional identity with the global marketplace.



Opposite Top: Crystal Towers, consolidating the narrative of the Wadi. Source: Henning Larsens Architects

Opposite Bottom: Crystal Towers podium Source: Henning Larsens Architects

Bottom: Crystal Towers, one of the very few stone-clad contemporary tall buildings in the world.
Source: Henning Larsens Architects

Final Thoughts

The global era has witnessed immense growth and the creation of wealth and opportunities in established and emerging cities around the world. This momentum is often reflected in city wide building frenzies and isolated mega projects. New found wealth and bullish economic outlook very often drive up property speculations, and the tall building typology is often the market's answer for supplying and, in most instances, pre-empting office and residential demand. Successful stand alone landmarks and icons have no doubt contributed to shaping the seductive skylines of global metropolises, at closer look however, the shear quantity of such new developments built at ever increasing speed risks producing a globally anonymous urban habitat with uninspiring public realms. As explored in the three towers and the two cities, a viable alternative to the status quo is an approach that considers and capitalizes on the context of the locality, be it social, cultural, physical, or environmental. The potential of the public realm in the vertical urban habitat to consolidate a local identity that fosters vibrant urban life should not be underestimated.



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