

Title:	Extending the Public Realm Into the Sky
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Subjects:	Architectural/Design Urban Design
Keywords:	Design Process Public Space Retail Skybridges Social Interaction Vertical Transportation Vertical Urbanism
Publication Date:	2016
Original Publication:	Cities to Megacities: Shaping Dense Vertical Urbanism
Paper Type:	1. Book chapter/Part chapter 2. Journal paper 3. Conference proceeding 4. Unpublished conference paper 5. Magazine article 6. Unpublished

Extending the Public Realm Into the Sky

将公共领域延伸到天空之中



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自2008年起Claude作为HLA的合伙人及设计总监，一直领导公司在亚洲的各项事务。不论是大型创新项目或总体规划，Claude在概念设计和项目开发方面均可发挥其独特专长。他的工作焦点是在各种复杂的条件下，寻找到一个整体的解决方案。在公司过去一系列重大国际项目中担任首席设计师，当中包括文化类项目、总部办公和总体规划等。



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Julian作为高密度总体规划和大型混合功能高层建筑的专家，对设计从概念方案阶段到深化设计阶段都有所贡献。作为城市规划师及建筑师，Julian对于综合体的设计经验使得他在很多大型规划以及标志性建筑设计中都起到的关键性帮助。他在高层建筑设计中也有独特的经验，从立面设计到节点设计，使得他在设计后期也是不可或缺的一员。Julian也是CTBUH在哥本哈根的城市代表。

Abstract | 摘要

The design of tall buildings in our megacities is going through an exciting paradigm shift: globally, we are observing new trends towards greater numbers of publicly accessible towers. Tall buildings are increasingly developing features of a semi-public or super-public nature. In addition to this prospect, the elevation of the public realm is driving the creation of new links extending from and towards the city streetscape below. The following paper will examine the development of this phenomenon, categorizing the increasing amount of publicly accessible towers in an attempt to discern an overall trend. Hong Kong offers some particularly unique cases of public spaces above the ground floor; such examples can be understood as reactionary measures to the city's extreme urban densification. Finally, two nearly complete projects by Henning Larsen Architects will be used to demonstrate this premise: The King Abdullah Financial District in Riyadh, Saudi Arabia and the Opera Tower in Foshan, China.

Keywords: Culture, Foshan Opera Tower, Public Space, Super Public, The King Abdullah Financial District

大城市的高层建筑设计方式正在经历重大而有趣的转变。在全球各地，开始有越来越多的高层建筑开放予公众，并在以往从未有的高度提供半公共空间和超公共空间。此外，公共空间的往上发展也有助建立高层和城市街道之间的关联。本文将探讨上述现象的发展，归类并分析日渐开放予公众的高层建筑，以了解整体趋势。在高于地面的公共空间方面，香港拥有十分独特的案例经验。这些案例可视为香港城市极度密集化下的产物。两个由Henning Larsen Architects事务所设计，接近完工的项目，以用作展示公共空间往上发展的方式：阿卜杜拉国王金融区和中国佛山坊塔大剧院。

关键词：文化、佛山大剧院、公共空间、超公共、阿卜杜拉国王金融区

Introduction

The design of tall buildings in our megacities is going through an exciting paradigm shift: globally, we are observing new trends towards greater numbers of publicly accessible towers. Tall buildings are increasingly developing features of a semi-public or super-public nature. In addition to this prospect, the elevation of the public realm is driving the creation of new links extending from and towards the city streetscape below. The following paper will examine the development of this phenomenon, categorizing the increasing amount of publicly accessible towers in an attempt to discern an overall trend. Hong Kong offers some particularly unique cases of public spaces above the ground floor; such examples can be understood as reactionary measures to the city's extreme urban densification. As such, they are more relevant for discerning global trends within these increasingly compressed city structures than more radically idiosyncratic designs, such as examples by OMA or Steven Holl within China. Finally, two nearly complete projects by Henning Larsen Architects (HLA)

引言

大城市的高层建筑设计方式正在经历重大而有趣的转变。在全球各地，开始有越来越多的高层建筑开放予公众，并在以往从未有的高度提供半公共空间和超公共空间。此外，公共空间的往上发展也有助建立高层和城市街道之间的关联。本文将探讨上述现象的发展，归类并分析日渐开放予公众的高层建筑，以了解整体趋势。在高于地面的公共空间方面，香港拥有十分独特的案例经验。这些案例可视为香港城市极度密集化下的产物。因此，比起类似于OMA（中央电视台）或者Steven Holl（万国城）的这类个性化设计，它们对于了解分析密集式都市的环球趋势更加贴题。在众多参考案例中，我们挑选了两个由Henning Larsen Architects事务所设计，接近完工的项目，以用作展示公共空间往上发展的方式。它们分别是位于沙地阿拉伯利雅得，面积达350万平方米并拥有96条行人天桥的阿卜杜拉国王金融区，以及位于中国佛山，可用作举行不同文化活动的佛山坊塔大剧院。我们可以得出两条结论：第一，让公共空间进入高层建筑，是保护和改善地面城市环境的一种方式。第二，高层建筑有能力成为超公共空间和文化空间。

will be used to demonstrate this premise: The King Abdullah Financial District in Riyadh, Saudi Arabia and the Opera Tower in Foshan, China. Two conclusions will be drawn: first, allowing the public realm into tall buildings is a way to preserve and enhance the urban habitat on the ground floor; and second, tall buildings are ready to become super-public and cultural.

Public Space in Tall Buildings

Beginning with the Eiffel Tower in 1880's France, and with the early "skyscrapers" of 1930's America, the public was invited to new heights, enjoying vistas possible only from their observations decks to the cities below (Figure 1). Such areas became the cities vantage points and, as such, their most prominent public spaces and iconic tourist destinations.

Today, the observation deck has become a mainstream feature for new towers. This typology can be extensively witnessed in China, offering a similar expansive viewing experience as early skyscrapers, and cultivating the creation of public allure and ownership synonymous with "the iconic." Despite this trend towards accessible upper levels, most observation decks can hardly be appreciated as truly public realms, usually charging high entrance fees or at their most permeable, structured entrance programs and usage rules. Some developers are, however, becoming more generous: such as the sky garden within "The Walkie-Talkie" (20 Fenchurch Street) in London, which offers a free observation deck and terraced plaza as a place to hang out – a truly public space.

The cultivation of public space can then be seen developing at lower levels, with the requirements for circulations exchange floors exacerbated through the need for both

the technological optimizations within lift design and the segmentation of lifts through exchange floors. These floors have evolved to be high-level areas for human interaction and service.

In the development of towers, the existence of sky lobbies can then be seen to transcend any pragmatic or technological necessity. They begin catalyzing an advancing trend towards a more truly public model. Within relatively small towers such as Hong Kong Island One, the sky lobby offers a generous floor for informal meetings supplemented with a small number of cafés and restaurants, adding value in the form of a more holistically activated tower.

The combination of restaurants with the vistas possible from towers is an old theme in tall buildings. One of Hong Kong's first tall buildings was the circular-formed Hopewell Center with its revolving panoramic restaurant; it has since been developed into regular "food and beverage" (F&B) towers, seeing the staking of restaurants atop each other as a singular building typology. Cities like Hong Kong and Tokyo have entire neighborhoods with F&B towers.

The trend towards the hybrid tall building seems to be increasing in pace, with luxury hotels being the most typical component. Here, the intermediate sky lobby serves as the elevated grand lobby for the hotel, usually combining the semi-private hotel quarters with more publicly accessible restaurant areas. This could be appreciated within the International Commerce Centre (ICC) in Hong Kong: its entrance lobby, located at a great height, generates the conditions of a small neighborhood.

We can also see the sky lobby becoming the main driver for design inside some towers, such as the new megatall Shanghai Tower in China. Within the tower, the sky lobbies

高层建筑中的公共空间

自从法国巴黎于1880年建成艾佛尔铁塔, 以及1930年摩天大厦在美国的兴起, 公众有机会登上这些高耸入云的建筑物, 在观望台上俯瞰下面的都市境况(图1)。这些观望台也就成为了城市的了望点, 也是最显著的公共空间和具代表性的旅游景点。

时至今日, 观望台已经成为新高层建筑的主流特色。这种情况在中国特别常见, 给予公众类似早期摩天大厦观望台的体验, 利用地标性来吸引公众, 带出“公众拥有”的意味。虽然高楼的较高层开放予公众已成为潮流, 但绝大部分的观望台都不算是真正的公共空间, 因其通常设有高昂的入场费或(在最宽松的情况下)必须遵守既定的程序或规则。部分发展商则比较大方, 就如伦敦的“对讲机大楼”(芬乔奇街20号)的空中花园, 为公众提供免费的观望台和花园广场, 是公众可游憩的真正公共空间。

公共空间在高层中的发展, 主要来自直梯设计的技术优化以细化, 由从较低的楼层作为换乘层逐渐往高处发展, 这些换乘层也成为了高层中的交流和服务空间。

在高层建筑的发展中, 空中大堂的出现超越了任何实际或技术上的需要。这些空中大堂开启了迈向真正公共空间的发展趋势。一些如Hong Kong Island One的较小高层也设有宽大的空中大堂, 当中有供非正式会面的会议空间, 也有几家咖啡店和餐厅, 为大楼在综合性方面增值。

结合了望点和餐厅是高层建筑的一个传统概念。作为香港首批高层之一, 合和中心的顶楼就是一家旋转餐厅。这种模式逐渐演化成为“餐饮大楼”, 在一栋大楼中, 差不多每一层都是餐厅。像香港和东京这样的城市有整个地区都遍布了这种餐饮大楼。

混合式高层的潮流发展步伐逐渐加快, 当中最典型的就豪华酒店。位于中层的空中大堂成为了酒店的大堂, 通常结合半私



Figure 1. Public space in tall buildings across the globe (Source: HLA)
图1: 在高层建筑中的公共空间(来源: HLA分析图)

can be compared to regular city-wide streets or gardens where the notion of “chance encounters” and interactions with strangers during a lunch is as likely on upper floors as it is on the ground level.

In addition to the escalated hybridization of the sky lobby, one can see the emergence of a trend towards elevated green public areas. Green spots are no doubt rare in the heart of an increasingly densified megacity. Terraced towers and utilized roofs offer a possibility to compensate and create outdoor public spaces. While the Willis Tower in Chicago was designed with large terraces, the result of strong formal and functional concepts did not render them accessible to buildings users – something that would be unthinkable today. The roof terraces of New York City’s Rockefeller Center are more visionary and generous, and its rooftop gardens contribute to the exclusive feeling of the entire center.

Today rooftop gardens seem to have developed into an entirely new dimension. Popular notions towards a green symbolism and a renewed focus on human well-being are encouraging the increased inclusion of shared green spaces in tower design. Within the implementation of rooftop gardens, Singapore seems to lead the way. There is such a vast array of diverse examples in the city – Marina Bay Sands and Park Royal, to name a few – that it could be characterized as a trend within the city’s approach to tall buildings.

Skywalks as a Second Ground Floor

Over time, and owing to a visionary developer, the Central District of Hong Kong has connected a vast majority of its central-most towers with skywalks (Figures 2 and 3). The extreme value of the land, intense car traffic, and a need to protect people

密的酒店房间区和向外开放的餐厅。这些都可以在香港的环球贸易广场看到。把酒店的入口大堂往上搬，也让入口大堂成为一个小社区。

我们也可见到空中大堂成为部分高层建筑的设计驱动力，就如超高层的上海中心大厦。该大厦的空中大堂可媲美一般街道或花园，碰到熟人和午餐会面的机会就如地面街道上一样。

除了空中大堂不断的混合化外，我们也留意到空中绿色公共空间的发展趋势。空中花园和绿化顶楼可以创造大楼缺乏的户外公共空间。位于芝加哥的威利斯大厦以非常正规和功能型的概念，设计出大型的空中花园，但这些花园并不对大厦使用者开放，这一点在今日是难以想象的。洛克菲勒中心的顶楼花园则较开放和有远见，成功为整栋大楼缔造独特体验。

今日，顶楼花园的发展似乎进入了新的阶段。绿色象征主义和以舒适度为本的概念变得流行，鼓励大楼在设计上融入公共绿色景观。环顾全球，新加坡在这方面算是走在最前，顶楼花园例子繁多（滨海湾金沙酒店、花园酒店），可以视为都市高樓的设计潮流。

作为第二层地面的行人天桥

过去发展商的设计愿景，在今天得到实现。香港中环区的大部分大厦都由四通八达的行人天桥网络连接起来（图2、3）。寸土如金的地域，加上交通挤塞和天气的问题，造就出中环大部分区域都在地面上添盖行人天桥的情况。这个行人天桥网络横跨整个中环区，一直延伸到半山的住宅区，全长有好几公里，让行人可以通过行人天桥和电动扶梯到处行走。在加拿大的卡尔加里，同样有一个由64条行人天桥组成的网络（“Plus 15网络”）覆盖整个市中心，让行人不用在冬天寒冷气候下还在地面走路。

在沙地阿拉伯利雅得的阿卜杜拉国王金融区的设计项目中，Henning Larsen Architects事务所也采用了行人天桥的概念（图4-6）。96条行人天桥将会连接总建筑面积达360万平方米的高楼大厦。阿卜杜拉国王金融区城市规划的焦点就是为行人提供方便舒适的选择。他们既可以在绿化而自然凉快的地面漫步，也可以在恒温恒湿有空调的行人天桥轻松到达目的地，就如香港和卡尔加里的行人天桥网络。

阿卜杜拉国王金融区的行人天桥系统把从前富现代主义和实用主义的多层交汇都市概念，转化成为以人为本的设计，并将焦点放在城市空间的品质和人的舒适感。

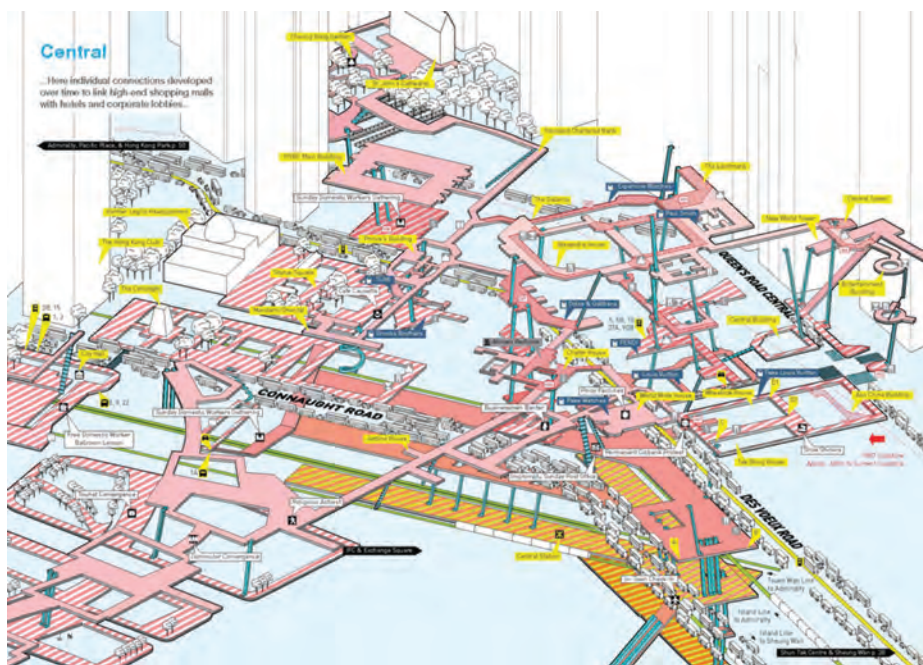


Figure 2. Hong Kong Central's skybridges (Source: Frampton, Cities Without Ground: A Hong Kong Guidebook)

图2：香港中环天桥系统（来源：Frampton，没有地面层的城市：一本香港导览）



Figure 3. Skybridges in the Central district of Hong Kong (Source: Photo by Hong Kong LAND)

图3：香港中环天桥（来源：由香港LAND拍摄）



Figure 4. King Abdullah Financial District in Riyadh, Saudi Arabia: 96 skybridges connecting 3,600,000 square meters (Source: Masterplan by HLA)

图4. 阿卜杜拉国王金融中心区，利雅得市，沙特阿拉伯：96个天桥连接360万平方米（来源：HLA 规划设计）



Figure 5. King Abdullah Financial District in Riyadh, Saudi Arabia (Source: Design by HLA, Photo by HLA)

图5. 阿卜杜拉国王金融中心区，利雅得市，沙特阿拉伯（来源：由HLA 设计及拍摄）

from climate created a unique condition which led much of the central district's towers to displace their ground floors to an above story. Owing to this device, Hong Kong actively enjoys elevated continuous connections, such as skywalks and escalators, which stretch several kilometers along the cities breadth and upwards towards its higher residential mid-level's on the mountains. In Calgary, Canada, a similar system of 64 skywalks –the "Plus 15 Network" – successfully connects the entire downtown; in this case, protecting from the harsh cold climate.

Henning Larsen Architects employed the skywalk model when designing the King Abdullah Financial District (KAFD) in Riyadh, Saudi Arabia (Figures 4, 5 and 6). Here, 96 skywalk bridges connect an array of tall buildings that total 3.6 million square meters in gross floor area (GFA). The formulation of the KAFD city plan was driven through offering pedestrians the choice of either circulating leisurely in a green and naturally

cooled pedestrian-oriented ground floor, or of circulating conveniently and efficiently in an interconnected, air-conditioned first floor – just as in Hong Kong or Calgary.

The skywalk system of KAFD has turned a modernistic and functionalistic vision of a multi-level transit city into a human-centered design focused on the quality of the urban realm and aimed at improving well-being. The skywalk model is then, perhaps, one way to allow for a more porous human-scaled neighborhood, respectful of and responsible for the urban condition. Asian cities are all too often victims of monstrously scaled podium shopping malls that destroy and entirely isolate the urban fabric of a city. The skywalk system could serve as a model for developers and cities that wish to preserve a more livable urban habitat on the ground floor.



Figure 6. Skybridges of the King Abdullah Financial District in Riyadh, Saudi Arabia (Source: Masterplan by HLA. Diagram by HLA)

图6. 阿卜杜拉国王金融中心区天桥，利雅得市，沙特阿拉伯（来源：HLA规划）

行人天桥系统也有助减少社区的人口拥挤问题，改善城市的环境状况。亚洲和中国的城市很多时候都有超大型的裙房式购物商场，这种商场的设计会破坏城市纹理。发展商和城市规划部门可以参考行人天桥系统，以保持市区地面的宜居性。

垂直式商场

香港的城市密度和地价促使发展商和建筑师发展出垂直式商场（图7）。时代广场、朗豪坊、国际广场、The ONE和希慎广场都是公共型高层建筑的成功例子。这些高楼几乎完全对公众开放。解决人流拥挤的问题方面，别具特色的电动扶梯（例如通天电梯）是一个获广泛接受的方案，并可把电动扶梯的功能和有趣的使用体验合二为一。自从办公空间和都市景观变得越来越密集，公共道路空间的相对增加很明显也甚有必要性。

往上移动的文化空间

希慎广场是香港最近建成的高层之一，其公共空间为垂直式商场的最高层打造景点，活化整栋大楼。在希慎广场的商场范围内，其最高的三层是香港最大的书店，而大型的美食广场则设在书店旁边。这设计让希慎广场和书店共同打造了香港独一无二的文化目的地，创造双赢局面。

其他的垂直式商场则选择在商场高层设置多厅电影院，为商场创造公众人流，也有助活化整栋大楼。

开放式高层大厦的未来发展将会与公共空间息息相关，这种现象主要源自大众文化



Figure 7. Collage of Vertical Malls in Hong Kong: The One by LWK, Hysan Place by KPF, and ISQUARE by Rocco Design Architects (Source: HLA)

图7. 由LWK设计的The one; 由KPF设计的希慎广场; 由Rocco Design Architects设计的国际广场 (来源: HLA)

Vertical Malls

The extreme density and land value in Hong Kong has also pushed developers and architects to create vertical shopping malls (Figure 7). Times Square, Langham Place, I Square, The One, and Hysan Place are all extreme and successful examples of how public a tall building can become. Solving the circulation challenge with monumental and cinematic escalators – “expresscalators” – seems to be a consensual solution, as it combines a functional need with an exciting public experience. With the densification of office space and cityscape, it would seem obvious to suggest an equivalent increase in public street space.

Elevating Culture

The most recently constructed of this array of vertical malls, Hysan Place has introduced a super-public program high-up within the vertical mall, creating an attraction that vitalizes the entire tower. Within the uppermost floors, a three-level bookstore can be found – the largest in Hong Kong – and complimented with a large adjoined food court. It’s a “win-win” situation for both the tower and the bookstore, as they benefit each other in creating a strong identity and cultural destination in the city. Other vertical malls will position features, such as a multiplex cinema, high-up to create a public flow that also works towards vitalizing the rest of the tower.

Super-public programs appear to have a future at the top of tall buildings. Popular culture seems to have started this phenomenon, but nothing would seem to prevent other public programs (theaters, concert halls, museums, etc.) from getting a spot at the top in the future.

Hong Kong has a history of super-public tall buildings: the central public library and many public community centers combining markets, welfare, indoor sports, and local libraries are often more than 10 floors high. A public church sits at the top floor of its third tallest building, the Central Plaza in Wan Chai.

Worldwide, we see that culture is increasingly going up: New York traditionally offers rather vertical museums, with Whitney as its latest addition. Tate in London also just completed its new vertical addition to the complex. In Hong Kong the new M+ will be 100 meters tall, while Roppongi Hills in Tokyo already offers a museum at the tower’s top.

Foshan Opera Tower

Combining cultural programs within a tower is the central focus for a 156-meter-tall building by Henning Larsen Architects (HLA), currently underway in Foshan, China (Figure 8, 9 and 10). Foshan is one of the most ancient and major cities of the Guangdong region, located furthest west in the string of cities that comprises Hong Kong, Shenzhen, and Guangzhou.

In 2008, HLA won a competition for the design of the cultural center of its new town – Foshan New Town – that is perhaps the most ambitious of the many new town developments in Southern China. The 700,000-square-meter project is dedicated to its cultural center, referred to as the “culture mall,” which was designed as a pedestrian-oriented area mixing public and commercial programs with interconnected podiums. With a site that faced the existing city and a branch of the Pearl River Delta (PRD), HLA realized early on the necessity for a vertical and iconic element within the new city center.

的需求, 但其他如剧院、音乐厅和博物馆等的文化规划也将陆续进占大厦高层。

香港在过去建造了很多超公共大厦。像中央图书馆和包含市场、康乐中心、室内体育馆及图书馆的市政大楼都超过10层楼高。位于湾仔的中环大厦是香港第三高的摩天大厦, 而其顶层就是一家开放予公众的教堂。

环观世界各地, 我们都看到文化场地往上移动的趋势。纽约以往一直都有垂直式博物馆, 包括最近开幕的惠特尼美术馆。英国伦敦的泰特现代艺术馆也最近完成了垂直式的扩建工序。在亚洲, 香港的M+博物馆楼高100米, 而东京的六本木新城也在顶楼开设了美术馆。

佛山坊塔大剧院

Henning Larsen Architects事务所正负责位于中国佛山的坊塔大剧院项目。坊塔大剧院楼高156米, 其设计概念来自坊塔和文化活动的结合(图8-10)。佛山是广东省历史最悠久的城市之一, 也是省内的大城, 位于香港、深圳和广州的西面。

2008年, Henning Larsen Architects事务所从佛山新城文化中心的设计比赛胜出。该文化中心是华南新城镇中最具规模的项目, 面积达70万平方米。文化中心将会采用“文化商城”的设计, 混合行人区域和公共及商务空间, 并以平台相互连接。佛山新城面向旧城区和珠江三角洲的一条支流, 我们在初期已经意识到新城区必须拥有一座垂直式的地标建筑。

在比赛的首个阶段, 我们建议兴建一座博物馆大楼; 而在第二阶段则建议兴建一座展览中心大楼。在方案设计过程中, 我们说服了当地市长为大楼开展实质性的规划, 以防大楼变成中国的另一个空壳工程。我们在方案中致力把大楼打造成为国家级的景点, 为访客提供多元化的文化活动, 把佛山定位成中国的文化之都。

因此, 规划必须演绎出佛山的文化和历史。佛山是粤剧之乡, 大楼中的戏剧表演场地将占24000平方米, 另外也预留16000平方米的空间设立有关佛山历史、文化和未来发展的博物馆。

大楼中的行人区域充满特色, 有电动扶梯, 行人天桥, 大量的艺术展品以及玻璃升降机。访客可以在可容纳1000人的戏剧院或邻近的黑盒剧场(可容纳500人)观赏演出, 也可在市博物馆观赏常设展品或在大堂或大型展览室欣赏临时装置艺术。此外, 大楼设有可容纳600人, 可用作举办活动、婚礼或晚宴的功能室, 也设有多家酒吧。大部分的楼层都让访客到户外的花园观赏景色。大楼的楼顶是一个免费的户外观望台, 让访客观赏珠江、旧城和新



Figure 8. Foshan Opera Tower, China : 70,000-square-meter public tower with an opera house, "Black Box," museums, restaurants, sky gardens, and an observation deck (Source: Section by HLA)

图8. 中国佛山剧院坊塔：7万平方米坊塔包括大剧院，黑盒子，博物馆，餐厅，空中花园（来源：HLA剖面分析图）

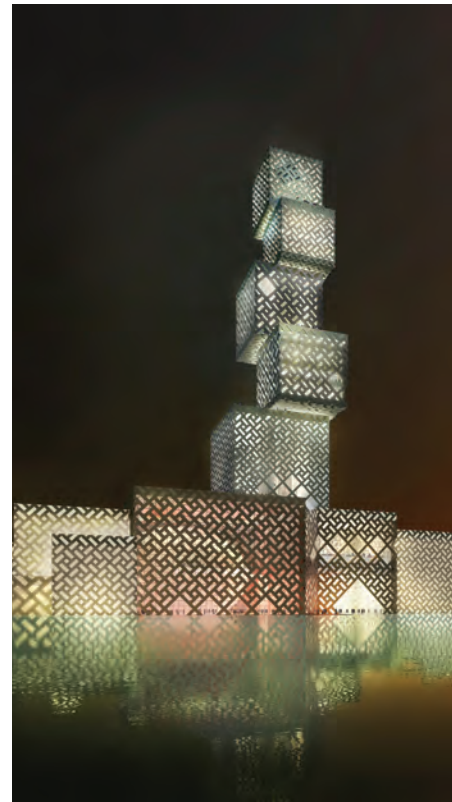


Figure 10. Rendering of Foshan Opera Tower, China (Source: Render by HLA)

图10. 佛山大剧院坊塔效果图，中国由HLA设计（来源：HLA）

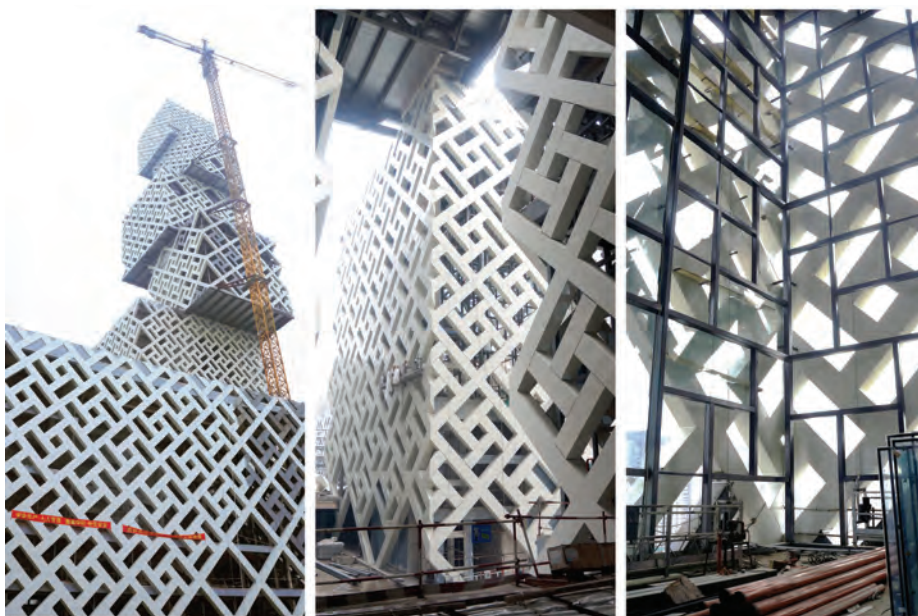


Figure 9. Foshan Opera Tower, China (Source: Section by HLA)

图9. 中国佛山大剧院坊塔，由HLA设计（来源：HLA）

In the first phase of the competition, HLA proposed this icon to take the form of a museum tower; but, in the second phase, the main tower program transformed into that of an exhibition center. During schematic design, HLA convinced the city Mayor that the tower needed a substantial program to avoid becoming another empty "white elephant." An ambition surfaced to create a national destination that offers multiple contents that represented and repositioned Foshan on the map. The program therefore

needed to be representative of the city and its history, thus a 24,000-square-meter opera house was proposed, as Foshan is the birthplace of Cantonese Opera. Furthermore, a 16,000-square-meter city museum about Foshan's history, culture, and future was also integrated into the project.

Along a cinematic promenade involving escalators, bridges, art-filled exchange levels, and glazed lifts, visitors can enjoy performances in the 1,000-seat opera house

城的景观，在非商业的空间里沉醉于阳光、光影和微风之中。

跟巴黎铁塔的设计一样，佛山坊塔大剧院也是座落于四块独特的立方体支柱，舍弃了平凡的大型裙房设计。这样的设计造就了建筑和地面之间出现类似闸口的空间。此空间让文化商城的气息一直延伸至珠江，同时成为商城的一个地标。空间就如文化商城的其他部分一样，受惠于由遮阳和当地风向缔造的凉快微气候。

大剧院的设计是建筑师和工程师共同合作的成果。Arup以立方体支柱为基础，为大剧院提供最佳的钢结构。所有楼层都是无柱的开敞平面，楼板由中间的核心桶跨到外立面的钢结构，同时外立面也有为玻璃幕墙遮阳的作用。外立面的钢结构和玻璃幕墙交互重叠，就像佛山的古老建筑设计风格一样，对当地居民很有意义。热烈的阳光通过玻璃幕墙，化身成为有诗情画意，变幻莫测的光影秀。晚上，大剧院建筑的灯光点亮附近的珠江，就像充满当地特色的纸灯笼一样。

佛山坊塔大剧院就如广州塔的缩小版，将会吸引数以千计的访客。他们来到大剧院的文化区域，将会被一系列的活动和表演节目所吸引，乐而忘返。他们可以通过体验这座具有人性化尺度的建筑和周边环境，对佛山新城产生新的整体观感。

佛山坊塔大剧院没有参与“谁建成最高的大厦”这样的肤浅比赛，相反，大剧院把

or in the adjacent 500-seat “Black Box.” They can also see permanent exhibitions in the city museum and temporary artistic installations in the lobbies or large exhibition halls (See Figure 8). A 600-seat function room can be used for welcome events, weddings, or even dining crowds. Those crowds can take a lift to one of the many bars in the tower; most levels will allow visitors outdoor access to gardens and views. At the top, a free outdoor observation deck offers views over the river and the ancient and new towns in a non-commercial space filled with light, shadows, and cooling winds.

Like the Eiffel tower, the Foshan Opera Tower stands on four distinct cubic feet, breaking up the massive podium that it otherwise would have created. This also allows for the axis of the culture mall to extend beneath it to the river, generating a monumental gate to the mall. The gate, as other parts of the culture mall, benefits from shade and local winds, which are utilized to create a cooler microclimate.

The design of the tower was the result of the close collaboration between architects and engineers. Arup delivered an optimum steel structure based on the inherent strength of the cube (Figures 9 and 10). All of the floors span from a single, central core to the steel exoskeleton. The exoskeleton doubles as a sun breaker for the curtain wall glass façade. The exoskeleton and the curtain wall façade overlap a pattern that is meaningful to the citizens of Foshan, as it is recurrent in its most ancient architecture. The light and shadows created by the façade pattern mitigates the intense sunlight into a poetic and ever-changing light show. At night, the tower illuminates the river as a paper lantern, another element of Foshan cultural heritage.

Like a smaller version of the Guangzhou Tower, Foshan Opera Tower will certainly attract thousands of visitors. In this building and in the cultural area that stretches from its feet, they will be offered a multitude of experiences and activities that could stretch their stay well into the night. Visitors will experience a comparatively human-scaled building and neighborhood that will reshape the perception of Foshan New Town as a whole.

What Foshan could not achieve in the rather superficial race for building the highest tower is compensated through the construction of a new typology of a super-public tower – one that focuses on people, space, and light.

Conclusion

Whether one observes the outstanding works of some “starchitect” or more vernacular phenomena occurring in highly dense cities, there is little doubt that tall buildings are beginning to welcome the public in increasingly generous and creative ways which, for many reasons, is beneficial to cities.

Firstly, as shown in Hong Kong and still to be proven in the King Abdullah Financial District in Riyadh, there is hope that duplicating the public layers of the city might allow it to retain the essential qualities of the ground-floor public realm. A public and well-connected first floor linking independent buildings can replace what the megapodium so obtusely achieves; it can create a large, coherent, super-connected, and acclimatized neighborhood, all while retaining an outdoor pedestrian and human-scaled ground floor.

It is urgent to influence developers and authorities in creating cities in a way that prevents further destruction of the existing urban fabric, and to instead promote the notion of urban habitat by offering alternatives to the over-sized and un-human podium buildings.

Secondly, tall buildings seem to be able to offer some relief in the heart of megacities by extending the public realm in vertical, super-public towers. Those towers act as acupuncture within the city, relieving and revitalizing entire neighborhoods.

Super-public tall buildings allow the city to further densify – a desirable overall goal for a sustainable and livable future.

焦点放在人、空间和光，是超公共高层新潮流的代表。

总结

无论是明星建筑师的出色作品，或人口稠密城市的当地建筑趋势，我们都看到高层建筑逐渐以慷慨和创新的方式对公众开放，这一点是无可置疑的。城市可在多方面从中得益。

首先，就如香港和快落成的阿卜杜拉国王金融区，在地面上加盖一层公共空间，有助维持城市的地面生态。一条位于地面上层，连接各建筑物的公共行人天桥系统，可以比完全覆盖地面，平凡乏味的裙房设计起到更好的效果。行人天桥可以让社区变得四通八达，气候宜人，同时确保地面人流不会变得拥挤。

目前重要的工作是说服发展商和相关政府机关，在发展城市时避免破坏现有的城市肌理，并须寻找过大和非人性化裙房式建筑以外的解决方案，关注城市生态的保护。

第二，高楼大厦可以纾缓大城市的空间压力，因为公共空间可转移到超公共大楼中。这些大楼就像“城市针灸疗程”中的针具，活化社区和纾缓空间压力。

超公共高层让城市可以进一步密集化，在可持续性和宜居性方面是可取的整体目标。