双城记
——上海与迪拜超高层及综合体项目开发
A Tale of Two Cities: High-rise and Mixed-use Development in Shanghai and Mumbai

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从很多方面来说，孟买和上海这两座城市荟萃了21世纪第二个十年里全球超高层项目的经典之作，孕育了不断刷新高度和速度的摩天大厦，这种情况也许只有在20世纪20年代的曼哈顿或者新千年的迪拜才能看到。每年甚至每个月，都有地标性建筑拔地而起。

与欧洲、中东和美洲不同，它们经历了全球金融危机的考验，并在外来投资和境外设计公司的合力推动之下呈现了蓬勃发展的景象。

目前，凯里森（Callison）在中国的核心业务领域是城市商

Mumbai. Shanghai. These cities represent the global epicenter of super high-rise development as we enter the second decade of the 21st century. Both are producing a new crop of tall buildings at a pace seen previously only in Manhattan in the 1920's or Dubai in the 2000's. Landmarks are being created seemingly on an annual, even monthly basis.

Unlike cities in Europe, the Middle East or the Americas, development in these two cities has not been extinguished by the global economic crisis. The crisis has, if anything, mildly tempered growth and brought additional foreign investment in from regions where development has been stifled.

Founded in Seattle, USA in 1975, Callison is an architecture and interior design firm with offices in 8 cities around the globe, including Shanghai and Beijing. A market leader in mixed-use, Callison is a full-service firm with the depth to

Malad位于孟买一处经济快速发展区域，项目包含五座住宅、一座办公楼及大型休闲中心，从而满足该区域未来发展需求。凯里森事务所利用设计实现地块功能的最大化。

业综合体规划及建筑设计，在上海地标性项目包括港汇广场、宏伊广场、悦达889广场，以及坐落于世博园对面的绿地滨江CBD。从这些项目案例中可以看出，超高层建筑往往是商业项目成功的标志性元素之一。

在印度，凯里森有着类似的业务体系：购物中心、百货和专卖店、住宅、酒店和商业办公楼。近期以超高层住宅方面的成绩最为突出。与以商业综合体项目为主导的中国市场不同，印度市场——以孟买为例——通常以单一功能为主流。项目开发蓝图往往以单栋或者多栋超高层住宅塔楼为主角。

为什么在上海，业主们争相建设商业综合体，而在另一座国际化大都市孟买则是单一功能建筑成为主流呢？另外，这两个领域中共有的主导要素超高层又是怎样作用于其截然不同的发展趋向呢？问题的答案蕴藏于经济、地理、社会和文化之中。

共性与个性

在过去的数十年里，我们对诸如迪拜、孟买和上海这些全球一线城市的了解并不算少。它们被视为未来城市密集型发展的典范。当全球金融危机在迪拜催生出空前的投机泡沫，孟买和上海的成长却从未止步。

这两座城市有着诸多共性：

它们同为亚洲人口最多的城市之一；它们在文化和经济领域都曾受到殖民制的影响；它们都有着大规模的西方经济投资及文化知识的引入；在过去的10年内都有着惊人的GDP增长；都是所在国家设计及创新的典范；都孕育着不断向上攀升的摩天高楼。

这两座城市又有着各自的特性：

这两座城市及其文化之间的不同之处成就了它们高层建筑迥然不同的发展趋势。

孟买和上海同为沿海城市。但上海的影响力已经超越长江三角洲，平坦的地形使它的地域发展没有任何阻碍。孟买则相对而言处于一座多山的沙漏型半岛，大部分地区都是有待建设或交通不易到达的。在上海，一条绵延东西的高运载力地铁线贯穿其中，以420km的延伸总长度刷新了世界纪录。而且，这个数据还有望在2020年之前翻一番。相比之下，孟买的运输系统基本上和50年之前大同小异。

关于土地管理，孟买有着非常复杂的体系，极其微妙；上海的决策者则是依托于大众监督，并遵循长期发展目标进行的，因此上海和其他中国城市一样，在城市发展方面受着大量制度和规范的制约。

从表象上来讲，上海和孟买殊途同归：这里的人们有着优越的生活、教育和收入。实则有着明显的不同。孟买人仍然沿用印度种姓制度，使得社会贫富更为悬殊，治安隐患突出，现代化发展有可能受到体制的阻碍。这些共性及个性对两座城市产生的

Malad高层综合体

provide leadership in all aspects of complex projects, including retail, planning, interiors, high-rise office, residential and hospitality. Actively practicing in China for over 20 years and in India for more than 10, the global firm has a substantial portfolio of projects in both regions, with more than 50 mixed-use projects on the boards in China alone.

Callison's core practice in China is mixed-use. Representative projects in the Shanghai area include Grand Gateway, Hong Yi Plaza, Yueda 889 and the soon to open Greenland Riverfront development, sited across the river from the 2010 World Expo site. As is evidenced by all of these projects, in conjunction with the retail development we see simultaneous integration of a high-rise component that often becomes the signature element of the project.

In India, our practice has reflected a similar diversity of uses: retail, residential, hospitality and commercial office. Recently the greatest growth we have seen is in high-rise residential in Mumbai. Yet unlike in China where mixed-use rules, development in India - and in this case Mumbai specifically - is almost exclusively single-use. The development landscape is dominated by mega-projects that are most often defined by either a single or collection of high-rise residential towers. These projects are the norm, not the exception.

So why does one city – Shanghai – embrace mixed use, while one – Mumbai - continues to perpetuate the single-use model? And how does the super high-rise – a prominent feature in both examples - factor into this divergence? This is a question whose answer delves into economics, geography, sociology and culture.

Similarities and Differences

Much has been observed in the recent decade regarding the "AI" cities – Dubai, Mumbai and Shanghai. These global centers were viewed as emblems of the future of development and density. With the global economic crisis came the bursting of the speculation bubble in Dubai, while in Mumbai and Shanghai growth continues. These two cities share some common features. Both are among the largest population centers in Asia. While precise accounts for Mumbai's population are hard to come by, it is estimated to be home to upwards of 18 million. Shanghai has 15 million residents, with more growth predicted in the coming decade1. Both are seen as the epicenter of economic growth

Pinnacle Towers高525m，为孟买的高层住宅带来了革命性的转变。在零售中心之上，两座内部连接的高塔容纳了住宅、办公、度假等功能

影响如何？相信孟买和上海的典型超高层建筑会告诉我们答案。

孟买

孟买最典型的超高层建筑多为高端住宅，而且普遍都是待售的奢华社区。项目通常完全独立，并常常需要由自身提供基础建设。基础建设的提升通常仅限于项目范围之内。于是，地块变得日益局促，交通不便且欠缺规整。这对地形格局和土地使用惯例都构成了挑战，并招致更大的投资和法律风险。

当场地极为有限，抬高的水景台阶及将项目最底层住宅单元提升到周边社区之上的愿望最终导致停车库需建立在地面之上。为了达到所需的停车面积比例，“迷宫式停车库”越来越多。有些项目甚至采取了把车库直接建立在50或60层私人住宅之上的做法。首层使用被最小化，仅限于入口大厅、车辆入口和服务功能。会所、Spa、泳池和健身中心之类的亲和力空间被提到车库以上。空中花园及舒适的露台被均匀排布，服务于大小一致的住宅。

总而言之，建筑越来越高，但却与上海如潮水般涌现高楼大厦的盛况不同。300m高的建筑在孟买看起来都略显羞涩——近年来，300m，400m甚至600m高的大楼方案比比皆是。对创

and innovation in their respective countries. Both have a colonial legacy that still exerts influence on the cities' culture and commerce. Both are magnets for foreign investment and cultural infusion. Both have seen robust growth in their GDP in the past decade, Mumbai at US $209 billion2 and Shanghai at $219 billion, surpassing Hong Kong for the first time in 20093. Both are seen as national bellwethers of design and innovation in their respective countries. And both are home to an increasing number of super-tall buildings, with even more in the planning and development stages.

Yet it is the differences between these two cities and their respective cultures that perhaps give the most insight into their divergent development trends and unique ways in which they have embraced the super-tall building. These differences also likely foretell the future of the super-tall building in each city.

While both Mumbai and Shanghai are coastal cities, in most other regards their geography could not be more different. Shanghai stretches out over the vast Huang Pu river delta. It is flat and expansive with no natural impediments to geographic growth. Mumbai on the other hand is situated on a hilly, hourglass-shaped peninsula. Much of Mumbai is considered to be un-buildable or at least inaccessible by conventional transit. At 7037, square kilometers, Shanghai is more than ten times the geographic area of Mumbai's 437 square kilometers4. Views are highly prized in Mumbai, with uninterrupted vistas of the Arabian Sea commanding top dollar. Shanghai has little in the way of dramatic natural landmarks or vistas, and with Pudong has created its own man-made skyline visible primarily to tourists strolling the Bund. Much of Shanghai, particularly the Pudong area, has modern, robust infrastructure, much of it less than 20 years old. An extensive, efficient, heavily used Metro cris-crosses the city; Mumbai's transit infrastructure is much the same as it was 50 years ago. Case and point: in Shanghai a mag-lev train will whisk you from the international airport to central Pudong at 430 kilometers-an-hour in 8 minutes. By contrast, expect to drive by car or taxi 90 minutes from Mumbai airport to the city center. There is a train which on some days is faster, but when traveling by rail arriving on time may be the least of your worries; being pushed out of the overcrowded train to certain death is a distinct possibility. In 2008 this was the misfortune of an average of 3 people per day.5

With regards to land management process, Mumbai has a complex process, verging on arcane, that often can easily get mired in politics and corruption. The underworld nexus with developers and a constant (and very real) fear of terrorism are omnipresent, leading to greater amounts of stratification of society, disparity of wealth and secured enclaves. Shanghai on the other hand has a top-down process where decision-making resides with a few and is typically furthering the agenda of long-term development goals already in place. It, like other Chinese cities, has significant regulatory influence over the type of uses that may be proposed in urban developments. Further, personal security and terrorism fears are largely non-existent, and good infrastructure and distribution of wealth are almost entitlements.

Both Mumbai and Shanghai are witnessing the evolution of a growth of middle-class, white-collar professionals. China is the scene of one of the greatest migrations in human history, as educated young people (often with their families in tow), move from rural areas to urban centers. Both cities are seeing increasing multigenerational density. Throughout China the one-child policy has had the effect of parents, in-laws and grandparents all wanting to settle close to the families of the current generation. In Mumbai there is a strong cultural tradition of newlywed couples likewise wanting to settle close to and in many cases care for the previous generation.

Sociologically both Shanghai and Mumbai may appear similar on the surface; their residents represent the full spectrum of age, education and income. However below the surface they are markedly different. Mumbai is still living with the legacy of the Indian caste system, and even modern development tends to be segregated by status. Shanghai sees a much broader integration of people of varying means, both in its history and in present developments. This last point, in addition to the more quantitative geographic and economic dissimilarities, is telling when examining how high-rise development is evolving

Pinnacle Towers

造地标性建筑的雄心、野心和渴望，是这种成长的动因之一，但它的动力不只于此，地形的限制将项目推向更高的天空。当水平方向发展的别墅型住宅成为不可能，这些地块的功能和实用性唯有通过高耸入云的建筑得以实现，另外直冲云霄的土地价格也是诱因。新型奢华住宅项目可售到每平方米10 000美元，这让一栋300m^{2}的顶层公寓至少售价300万美元。

上海

值得一提的是，孟买仅属于特例，它并不代表印度其他地区的房地产发展趋势。

上海的故事大相径庭。上海是一线和二线城市发展的楷模，这里的超高层建筑和孟买的单一功能建筑一样，打造着标新立异的城市图腾。上海的高层项目整合着零售、商业、住宅和酒店等功能，以商业综合体居多。项目通常设有一座不低于300m、总面积15万m^{2}左右的标志性超高层塔楼，功能为办公楼或者商业综合体。如果是综合体项目，则往往还设有五星级酒店、餐饮、康体、宴会厅及会议中心等设施。某些情况下，高端的服务式酒店也是备选方案之一。

超高层建筑除了商业综合体的形式之外，也可以是独栋或

in both cities.

What impact are these similarities and differences having on super-high-rise development in each respective city? The profile of the typical tall building project in both Mumbai and Shanghai show us the answer.

Mumbai

Far and away the most typical super-high-rise type in Mumbai is high-end residential, nearly always in the form of for-sale luxury condominiums. The project will be stand-alone, and often have to provide much of its own infrastructure. Infrastructure improvements are typically limited to the boundaries of the project, with the exception of furnishing upgraded housing for residents that may have been bought-out and displaced by the luxury development (aka “rehab housing” to replace former slums). The site will be very small, difficult to access and often irregular in shape. This is due to both challenging geography (remember, Mumbai is essentially a collection of hilly outcroppings) and historic patterns of land use that make assembling large development plots both costly and legally challenging.

The small sites, high water table and the desire to elevate the lowest residential units above the surrounding neighborhood will drive parking above ground. Automated - or “puzzle” - parking is frequently employed to reach desired parking ratios on the tight sites. Some projects have even gone so far as to propose automobile elevators that will take cars directly to one’s individual unit 40, 50 or 60 levels above ground. Street level uses are minimal, often limited to entry lobbies, auto entries, service and perhaps some token retail. Amenity spaces such as clubhouses, spas, pool decks and fitness areas are typically elevated and located atop the parking deck. However an increasing number of projects are elevating these areas even higher, locating them within the high-rise tower itself, often in multiple locations. These sky gardens and amenity decks are often segregated to service clusters of same-size units – for example the one-bedroom clubhouse is separate and distinct from the 4-bedroom clubhouse, discouraging interaction between owners of each type –and by extension – income bracket. In the super-luxury realm, individual private pools are the norm, usually associated with extensive private terraces.

Above all, the buildings are increasingly tall. While certainly not as flush with super-tall buildings as Shanghai – the tallest completed building is just shy of 300 meters - the last several years have seen proposals for 3, 4, even 600 meter residential towers. Clearly ego, prestige and the desire to create an iconic landmark is one reason for this growth spurt. However there are other motivating factors. The geographically constrained small parcels squeeze development opportunities skyward. Horizontal, luxury villa-type residential is simply not possible. Skyrocketing land prices are also a factor. Even though small, these plots demand a land use intensity that can only be satisfied with a super-tall building. New luxury residential projects are sold at Rs40,000 to Rs50,000 / sf or roughly $1,000/sf, making a 3,000sf penthouse unit at least $3 million. Parking also plays a role. Transferable Development Rights permit the incentive of additional FAR through building multi level public parking decks. However it should be noted that this concept is currently being reviewed and possibly suspended as developers have taken advantage of this incentive by potentially flooding a 2 square kilometer area of the city with more than 20,000 spaces. Finally, zoning and floor area ratio interpretation practices that favor the developer encourage buildings to go ever higher. Every developer has at their disposal a bag of tricks that can take a base FAR and effectively double or even triple the effective built-up, and hence salable, area. Through extensive use of ancillary spaces such as double-height lofts and exterior terraces, a unit that is measured for the zoning authority at 100 SM may list for sale at 300 SM. Multiply this practice over an entire high-rise building and one can see how tremendous height can grow from such strategies as developers try to outdo one another in the pursuit of height and luxury.

Shanghai

It must be mentioned that Mumbai is an anomaly and not representative of the

多栋住宅的载体，形式多样，包括服务式公寓、产权式公寓或SOHO，且通常在商业裙楼的屋顶设有独立的亲和空间和园林。住宅的使用约占项目比例的50%。

超高层建筑的商业裙房往往是整个项目的功能和经济核心。它们通常为5~6层高、平均地上总面积为20万m^2的封闭式购物中心。超高层建筑商业裙楼的组成元素包括2.5万~4万m^2的百货商场，30%的楼层总面积分配给专卖店、休闲和娱乐设施，20%以下的面积分配给餐饮。项目还经常设有10~12厅的影院、IMAX剧场、KTV和家庭娱乐中心，以及在很多情况下可设置一座奥运标准的滑冰场等。此外，商业购物中心通常还设有一座5万m^2左右，2~3层的户外时尚生活体验中心，为初级主力店和餐饮提供更大的空间。

一到两层的小型“地铁式”地下商业空间不足为奇。此外，可设置7 000~10 000m^2的超市。停车及延伸服务可设于地下的二至三层。总体来说，这些项目总面积可达到40万~60万m^2。

在这些商业综合体项目中也存在特例。它们通过地下通道或地铁站与周边项目相连，并设有内部通道和服务网络增加交通便利性。基础建设的提升必不可少，通常情况下，业主也不吝于投入资金。

这些项目总体被定义为HOPSCA（豪布斯卡），即酒店、办公楼、园林、购物中心、会议中心和公寓，是一种激励商业综合体项目的半官方语言。当一个超高层商业综合体至少包含上述5种功能之中的3种，那么，就可称其为HOPSCA。

在孟买，我们可以清楚地看到为什么单一用途的高层住宅是其主要的发展趋势，并且将来很长一段时间会保持这个状态。首先，随着建筑密度增高，地域性限制要求城市只能够继续纵向开发。不完善的交通让零售建筑的生存变得异常困难，优秀的住宅景观则更具投资价值，因此整个市场的多元性渐渐下滑。但是社会习俗也是影响因素之一。与同一社会阶层居住在一个紧密圈子里的传统习惯让开发商更倾向于相似的、串联并封闭的社区。

因此，在未来我们会看到更高、更加奢华的住宅建筑鹤立在孟买的上空。这种发展策略的生命力仍有待考验，但是未来的情况很有可能是过度建设，并且市场对这种高端产品的需求很难维持。

上海乃至中国整体则是另外一种情况。在这里多元化是一种优势，高层建筑往往充当着一个项目的标志或代名词，但同时得到其他功能的支持。从经济角度来讲，商业综合体代表着抵抗市场波动的一种保险机制，零售和住宅可则扮演着高层建筑项目资金催化剂的角色。住宅在未来最容易受到市场需求和政府对租赁买卖调控的影响。随着中心城区可建设用地变得愈发稀少，零售部分将会更加垂直化发展。因此，多元化选择是这些项目开发的基础，生活中心将会作为室内购物中心的副产品甚至是替代

real estate trends in rest of the India. By contrast, Shanghai is emblematic of development throughout first and second tier Chinese cities. Here the high-rise manifests itself in a form quite dissimilar from the single-use model seen in Mumbai. These are quintessentially mixed-use developments. Mega-developments will be anchored by a landmark super high-rise tower, typically of 300 meters or more with an area of over 150,000 SM. This is often either an office or mixed-use tower. If mixed-use the tower is shared by a 5-star hotel, usually of 300-350 keys, complete with F&B, amenities, ballroom and conferencing facilities. In some instances we are seeing high-end serviced apartments appear in these towers as well.

In addition to the mixed-use high-rise component, there will often be one or more residential towers proposed, in either serviced apartment, condominium or SOHO format. Usually between 100 and 150M in height, these towers will have their own distinct amenity and garden spaces, often on top of an extensive retail podium.

The retail podium represents the functional and economic heart of these projects. Typically these will be 5 to 6 level enclosed malls with up to 200,000 SM above grade, although on smaller sites the retail program may grow to as high as 10 levels. Components include a 25,000 to 40,000 SM departments store, 30% of GLA allocated to specialty shops, leisure and entertainment and up to 20% of the space allocated for food & beverage.

Entertainment offerings abound. Projects will often be home to a 10-12 screen Cineplex, IMAX theater, KTV and Kidzania and family entertainment centers, and in many cases an Olympic-sized ice rink.

Increasingly the retail mall will be complemented by an outdoor lifestyle center of +/-50,000 SM. Typically 2-3 levels, these centers provide larger spaces for both junior anchor and F&B formats.

Below grade it is not uncommon to see one or two levels of small-format “subway” retail on B1 and B2 in addition to a 7,000 to 10,000 SM hypermarket. Parking and extensive servicing is below this in another 2-3 levels. Taken as a whole, these projects can represent 4, 5 or 600,000 SM of built-up area.

Rarely will these mixed-use developments exist in isolation. They will often be connected to adjacent projects through underground passages and very frequently they connect to a metro station. Internal road and servicing networks are developed to ease pressure on surrounding traffic. Infrastructure improvements are a must, with developers often helping to finance utility upgrades that provide a higher level of service to the project and the surrounding neighborhood.

Taken together these developments have been codified by the term HOPSCA (pronounced "hao bu si ka") It is an acronym for Hotel, Office, Park, Shopping mall, Convention and Apartment, and represents a quasi-official policy of encouraging mixed-use development. A development is considered a HOPSCA if it includes at least 3 of the 5 functions, often with one, such as a super-tall mixed-use tower, at it’s core.6

In Mumbai, it clear there are some empirical reasons why the single-use high-rise development is the norm, and likely to stay that way for some time. Geographic constraints dictate that as density increases, the only direction to go is up. Sub-par transit makes retail viability difficult. Prized residential views are also proving worth the investment. Creative land-use interpretations and land value escalation create a highly competitive playing field that rewards high-end, for-sale residential development and discourages diversity. Truly diversified, interconnected mixed-use is difficult to make work if there is nothing to connect to. Yet the social legacy described also plays a significant factor. The desire to stay within tight-knit circles of like-status peoples encourages properties to resemble more a cloistered enclave than a traditional diverse urban community.

To fully grasp the influence on cultural verses physical constraints in Mumbai consider the evolution of Hong Kong. Burdened by quite similar geographic constraints as Mumbai and sharing a similar density and economic potential as a gateway city, it nonetheless overcame these constraints to become an early adopter and incubator of mixed-use, retail and high-rise development. It was

港汇广场融合商业、住宅、酒店和写字楼于一体，位于上海最繁华的徐家汇地铁站枢纽黄金地段，这一30万m^2的综合体包括7层裙房10万m^2的商业中心、两座34层的住宅楼、两座52层的写字楼以及一个9层的服务式公寓。长期的观察和市场洞察力使得这一分期开发项目与20年的经济市场变化同步前进，历久弥新。

品。商业综合体提供着一站式的生活服务，象征着中国正在加速进行的城市化进程。它们最终将会像在北美和欧洲进化了几个世纪的城市中心一样提供高质量的服务和功能。

未来趋势

展望未来，我们不难看出一些趋势将主宰今后的城市规划、综合体和高层建筑开发。以中国来说，将会出现如下的五种趋势：

（1）更多元化的休闲娱乐选择。除了传统的餐饮娱乐场所如电影院及家庭娱乐中心外，会有更加丰富的选择，如室内滑雪场、主题公园、水族馆等。随着竞争愈加激烈，提供的项目会变

not saddled with nearly the social stratification that even modern-day Mumbai experiences, and its growth patterns reflect this.

So in the near future we will likely see ever-higher – and ever more luxurious – developments populating Mumbai's skyline. The long-term viability of this development trajectory remains to be seen, but recent history suggests that over-building is a possibility and that sustained demand for such high-end product may be difficult to maintain.

Shanghai – and China as a whole - is a different story. Here the diversity of uses is perhaps these projects' greatest asset. The super high-rise is the icon that defines the project and gives it brand identity. Yet it is strengthened economically and socially by a supporting range of functions that represent a convergence of economic goals and social patterns. Economically mixed-use represents an insurance policy against market fluctuations and speculation.

得更加大胆前卫，从而吸引更多消费者。

（2）机构化、文化以及民生功能的结合。这些项目好像一个微型城市，我们会看到项目的各种功能将不会再那么以商业零售为中心，而是与一个社区的生命活力息息相关。医疗保健、学校、社区中心、剧院、博物馆等都会在未来的HOPSCA式开发中充当重要的角色。

（3）高层建筑更多与综合体结合。目前，高层建筑开发虽然大多与综合体结合，但从功能上来讲却是割裂的，这也是综合体开发至关重要的因素。或许我们可以借鉴印度的住宅开发，可以看到空中花园、餐饮中心、观景台和半开放式空间都已融合在高层建筑之中。有些高层建筑被用作自身的发电站和蓄水池，甚至有些未来主义者倡导垂直城市农场。

（4）二、三线城市爆炸性的HOPSCA式开发。的确，未来极有可能的是这些意义重大且创新的高层商业综合开发项目不会发生在上海或者深圳这些一类城市，而是徐州、淮安、无锡或沈阳等二、三类城市。

（5）更高！更高！更高！

不可避免的是，未来高度的极限将继续被打破，尤其是商业综合体中的超高层建筑。当超高层建筑本身成为一个品牌的时候，高度则成为其衡量基准，因此更多的开发商期望借此赶超其竞争对手。

翻开上世纪中期出版的世界百科全书，寻找世界上体量最大的生命体，答案会是位于美国加州海岸的红杉，这种神奇的树木可高达83m。但随着时间的推移，认知发生了改变。1993年，生物学家Michael Grant及其同行指出，位于美国犹他州的杨树林是这个星球上面积最大的单体生物。这一概念也逐渐被科学界广为认同。这片由4万棵树木组成、覆盖43万m^2的杨树林，都是来自同一个根系，有着同样的DNA。

如果印度的超高层建筑历史及现状被定义为一个红杉树不断拔高的时代，那么高层建筑在中国的未来，则会像杨树林一

悦达889广场座落于上海最主要的经济区之一的静安区，是一个充满活力的综合项目交汇地，创立了一种积极的室内－户外体验。作为为亚洲首个Freeform云顶商场，独特个性、轻盈流畅的云顶式设计，将整个上海的风貌浓缩于云顶天空之下，给人以通透感和现代节奏感。而蜿蜒的地台饰面不仅与Freeform云顶呼应，又与流走于申城高楼间的苏州河如出一辙，堪称“室内”苏州河。

Retail and residential uses (often completed first and up & operating while the high-rise component is still being constructed) help to provide the financial catalyst for the high-rise. The landmark tower in turn gives prominence and identify to the project over the long term.

Sociologically mixed-use high-rise developments can be seen as going hand-in hand with China's increased urbanization. As rural citizens migrate to urban areas their social status and economic means grows. With this comes increased expectation of the middle class for connectedness, convenience, diversity and lifestyle amenities. They represent a 21st Century aspirational generation that desires a better life than those previous. Mixed-use projects satisfy these desires, and in many cases a gleaming tower becomes its symbol. They provide a one-stop lifestyle option for people of diverse backgrounds and means, and represent an accelerated urbanization that in the end provides many of the same qualities as established urban centers in Europe and North America that have evolved into their present form over centuries. Tellingly, this evolution is also similar to the patterns that fueled urban re-development in the United States in the 1990's and 2000's. In that case, as their children left the home older, wealthier, mobile upper middle-class people migrated back into the city from the suburbs in large numbers, seeking culture, convenience and connection to the diversity that the city had to offer. Yet in the U.S. growth of the commercial and residential real-estate inventory has happened steadily over the course of the last century, so there was no need to rapidly infuse cities with the immense volume of rental space that super high-rises represent. So high-rise development in the U.S. remains modest by Chinese standards. Shanghai is of course only a metaphor for any number of similar Chinese cities. Nearly any first-tier Chinese city could be similarly compared to Shanghai and Mumbai, and the second- and third-tier cities are not far behind.

Future Trends

Looking forward, it isn't difficult to see the emergence of a number of trends that will shape urban design, mixed-use and high-rise development and in coming years. Focusing primarily on China, what follows are five future evolutions we may see down the road.

1) Increased diversity of entertainment and leisure offerings.

In addition to the typical F&B and entertainment venues such as cinemas and family entertainment centers, entertainment options will grow. Already we are starting to see the inclusion of elements such as indoor ski hills, theme parks, museums, aquariums and the like. As competition increases, the offerings will become more bold to attract the attention – and RMB – of future guests and residents.

2) Inclusion of institutional, cultural and civic functions

Like the small cities these developments emulate, we will start to see

悦达889广场

样，成为一个统一、相互联接的系统。虽然拥有着同样的DNA，但承担着的作用与功能不同。

这种进化过程并不意味着标志性高塔时代的结束，相反，它预示着更加集中、丰富和多元的高层综合体时代的到来。在未来的高塔森林中，有些一定会向更高的蓝天生长，成为标志性建筑，但是他们并不是独立的，而属于整片森林中的一员。

proliferation of functions that are perhaps less retail-centric but are essential to the sustainability of vital communities. Health care outlets, schools, post offices, community centers, public performance venues – all of these will likely have a role in HOPSCAs of the future.

3) More integration of the super high-rise into the mix:

The present pattern of the super high-rise being adjacent to but nearly functionally disconnected from a mixed-use development will likely evolve such that it becomes an ever-more critical component of the mix. Perhaps taking a cue from Indian residential development, I believe we will see the integration of even more sky gardens, F&B outlets, observation decks and other semi-public spaces in the super tall buildings themselves. We are already seeing tall buildings being utilized for on-site power generation and water collection, and some futurists have even gone so far as to suggest vertical urban farming. While this may be down the road a ways it suggests that towers may become even more integrated into the more terrestrial aspects of a project.

4) Explosion of HOPSCA developments in 2nd and 3rd tier cities:

This is news to no one attending this summit, of course, but it does bear mentioning. Indeed it is entirely likely that some of the most significant and innovative super-tall mixed-use developments of the future will happen not in cities like Shanghai or Shenzhen, but rather in Xuzhou, Wuxi or Shenyang.

5) Taller, Taller, Taller!

Finally, it is inevitable that height boundaries will continue to be pushed, particularly in buildings that are a part of a mixed-use development. As the tower often becomes the brand, height becomes a calling card and every developer will continue to want to out-do the competition next door or across town. 300 meters may be the expectation today, but if growth continues at its present pace it is not unreasonable to expect to see that number grow to 400 or even 500 meters in the next decade.

If you were to open the World Book Encyclopedia in the middle of the last century and referenced the largest single entity in the natural world, you would have been told that the California Coast Redwood tree fit that description. With a volume of 2,500 cubic meters and a height of over 83 meters, this explanation would have met with no objections.

Times, and our subsequent view of the world, have changed. Citing the same reference today, you come upon a different answer to the same question. In 2011, the largest single organism is now recognized to be a stand of aspen trees in the American state of Utah. Located in the foothills of the Rocky Mountains, this stand of trees shares one unified root system, one DNA, and covers 430,000 square meters, making it the largest single living organism on the planet.

If the history of the super high-rise was defined by an era of towering redwoods, the high-rises of the future will increasingly resemble more a stand of aspen trees, part of a unified, connected system that while housing different functions all share the same DNA. While there will certainly be some of these trees that reach further skyward than others to become landmarks, they will not do so in isolation

作者简介

Peter Krech：凯里森建筑事务所合伙人，毕业于美国明尼苏达大学，获建筑学硕士学位。拥有包括项目设计、管理和施工管理在内的全方位经验，并专业于商业高层建筑设计。他深切了解独特、复杂的多用途高层建筑并熟知现今市场的要求，包括结构、机械和各种系统的设计，更了解永不停止的市场开发与租户要求。他凭借对每一个建筑系统的细节至维持设计概念的周详考量及丰富的专业知识经验，帮助业主在整个项目的设计过程中达成其设计目标、预算并保证设计的完整性。

Peter Krech, Master of architectureUniversity of Minnesota. He is experienced in all phases of project design, management, and construction administration, and is an expert in commercial high–rise projects. he has a strong understanding of the unique complexities of high–rise construction and he is familiar with today’s sophisticated structural, mechanical and envelope systems, as well as with the needs of the ever–evolving development and tenant market. His ability to work through speciic details of building systems while maintaining a thoughtful overview of design concepts help assure that the client’s goals, budget and design integrity are maintained throughout a project.