

Title:	<b>Shaping the Environment of the Urban Complex from the Urban Point of View</b>
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Subjects:	Architectural/Design Building Case Study Urban Design
Keywords:	Environment Human Scale Integrated Design Skybridges Social Interaction Urban Design
Publication Date:	2014
Original Publication:	CTBUH 2014 Shanghai Conference Proceedings
Paper Type:	1. Book chapter/Part chapter 2. Journal paper 3. <b>Conference proceeding</b> 4. Unpublished conference paper 5. Magazine article 6. Unpublished

# Shaping the Environment of the Urban Complex from the Urban Point of View

## 城市视角下的综合体环境塑造



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Peter Kok joined Shum Yip Land Company Limited in 2012, is a senior business consultant at Shenzhen Investment Limited and is the deputy general manager in Shum Yip Land Company Limited. Prior to this, he joined Swire Properties in 1997 and served as the general manager in its southeast China region. He took charge of site evaluation, planning, construction and the business operations of Taikoo Hui, a high-end shopping mall located in Guangzhou. Before that, he was the marketing director of Hutchison Whampoa Limited and took part in the planning and operation of Meilong Town Square in Shanghai, Metropolis in Chongqing and many other commercial projects.

2012年加盟深业置地，现任深圳控股高级商业顾问、深业置地常务副总经理。1997年加入太古地产，2002年至2012年，任太古地产广州及华南区总经理，全面主持广州太古汇的地块评估、规划设计、建设施工和招商推广等工作，将其打造成为广州高端购物中心的典范。在任职太古地产前，曾任和记黄埔市场营销总监，参与上海梅陇镇广场和重庆大都会等多个商业地产项目的规划运营等工作。

### Abstract

This paper begins with a discussion of the relationship between “architecture, environment and people” and suggests that the shaping of the environment in urban-complex projects should be developed from a more macroscopic perspective. The interaction between architecture, environment and people should play a more important role. For instance, the ecological gallery bridge in the Upper Hills project featured in this paper illustrates the significant influence that peoples’ activities have in the design of urban complex.

**Keywords: Urban Context, Environment of the Complex, Ecological Gallery Bridge, Connection and Composite**

### 摘要

本文从探讨“建筑、环境、人”三者关系开始，指出城市综合体的环境塑造应以城市视角从更宏观层面考虑，重视人与建筑、人与自然、建筑与城市的互动，并结合深业上城项目的生态廊桥案例说明人的活动因素在城市综合体环境设计中的重要作用。

**关键词: 城市视角 综合体环境 生态廊桥 联结与复合**

### City: From Architecture to Environment

Ever since the emergence of human civilization, the complicated relationship between architecture, environment and people has always objectively or subjectively promoted the development of society. Ancient people built architecture as a protection against the uncertainty of the environment. As the evolution of human beings and the development of technology progressed, architecture gradually embodied the demand for aesthetics and comfort, eventually transcending nature and causing irreversible damage. However, with a better understanding of the balance between those three factors, human beings have begun to rethink the subtle relations between architecture and environment and rebalance their roles and proportions. By viewing the natural environment in a more macroscopic perspective, architects and developers could better utilize natural resources and remove the gap between people and nature. For instance, architects are now connecting inhabitants to, rather than simply protecting them from the environment. Contemporary urban and architecture design are turning their focus from buildings and infrastructure alone to interchange with and shaping of the environment. The environment is not only a simple, functionally lifeless artificial system; rather, it is a reflection of our society. Human beings should search for methods consisting of their own values mixed with the values of the nature.

### 城市: 从建筑到环境

建筑、环境、人，三者之间的关系可谓错综复杂，自人类文明开始发展至今，或客观或主观，一直以不同形式推动着社会发展，或适应着社会发展。远古人类需要建筑作为保护以应对环境的不确定性。随着人类进化与技术发展，建筑功能也逐渐体现美学和舒适要求，甚至凌驾于环境，一度造成不可逆转的破坏。而现世代，随着对三者关系的深入认识，人类重新思考建筑和环境的微妙关系，在自身发展过程当中，重新平衡三者间的角色和分量，从更宏观角度审视自然环境，合理利用自然资源，修复人类社会与大自然之间的鸿沟。从最早人类以建筑应对环境，到今天人类以建筑沟通环境，现代城市设计与建筑设计已不仅着眼于城市与建筑本身，更着眼于环境的交流与塑造。环境不仅是一个简单的、具有一定功能的无生命的人造体，而同时是对人类社会文化的反映，与人的存在密不可分。人类应努力寻求使自身价值和自然价值相一致的道路。

打破隔阂建立建筑与环境的沟通并赋予其意义的，是城市中的主角——人。因此，从人的使用角度出发，在具体的建筑设计中，必须同时着眼于“大”和“小”。

“大”——建筑与城市一体化设计，创造能融合于原有城市肌理与环境元素的街区或社区，实现与城市空间有机结合，与交通系统有效联系，成为混合功能使用中心，提升城市空间价值，实现城市职能的不断优化。



Figure 1. Shum Yip Upper Hills rendering (Shum Yip Land Company Limited)  
图1. 深业上城项目整体效果图 (出自: 深业置地有限公司)

To bridge the gap between architecture and environment, and establish a dialogue between them, we start from the needs of people, focusing on “bigness” and “smallness” in architecture projects.

“Bigness,” or the integration of a building and the city, creates new blocks or communities that could fit into the original urban texture and environment, thereby synergizing the urban space, integrating with the transportation system and forming a mixed-use hub, promoting the values of urban spaces, and optimizing the functions of the city.

“Smallness,” or using “human circulation,” “human scale,” “humanization,” and “human experience” as the starting point for all problems, embodies the spirit of “human-oriented.”

The prominent Roppongi Hills project in Tokyo, Japan, synthesized these two aspects, and remains the best study-tour destination for urban complex developers in China. Roppongi Hills combines the development of the district with the overall planning of the city. Also, it keeps the original water system and greenery by integrating the surrounding parks and plazas into the development. More than half the area of the project is exterior open space, characterized by excellent artistic design and spatial planning. The project consists of shopping, catering, living, transportation, recreation and entertainment functions, demonstrating a new mode of urban life.

### Integration and Composition of Architecture and City

Contemporary cities, societies and economies are integrated and combined to make the city a complicated composite of various functions. Also, cities foster the trend of “integration of architecture and city.” With such a background, the planning and design of urban complexes should emphasize the following aspects:

“小”——以“人流线”、“人尺度”、“人性化”、“人感受”作为考虑所有问题的出发点，处处体现“以人为本”的人文精神。

著名的日本东京六本木新城虽然落成已超过十年，但依然是国内众多城市综合体开发商考察学习首选目的地，正是因为很好地综合了以上两方面。六本木新城在规划时将地区发展与都市整体规划相结合，除了保留原有的水系和绿化，还整合了周边公园和广场空间；将规划区内一半以上区域作为户外开放空间，结合良好的艺术设计与空间规划，将整体空间塑造得更为艺术化与人性化。其规划包含了衣、食、住、行、游、购、娱等各方面需求，成为一种新的都市生活形态标杆。

### 城市建筑一体化，建筑环境复合化

当代城市与社会经济相互交融、有机联系，让城市本身成为一个巨大的、复杂的多功能综合体，促使“城市-建筑一体化”的高速发展。在这样的大趋势下，城市综合体的规划设计应着重强调以下几个方面：

1. 让不同功能空间有机融合，满足人们在不同时段内的不同需求。
2. 增加市民共享的城市空间，重视立体步行系统，合理组织与缝合被汽车交通打破的人尺度的城市空间。
3. 将自然生态要素在立体层面布局，模糊项目与城市、自然环境的界限，正视城市气候特征和历史，并将之融入建筑设计，塑造有内涵的区域环境特征。
4. 重视综合体环境设计的可识别性，建立从城市区域、建筑形态到人视空间层次分明的环境标识。

而这正是深业上城 (UpperHills) 最初的规划思想。通过建筑、环境与城市的一体化设计，创造能融合于原有城市肌理的街区，实现与城市空间的有机结合、与交通系统的有效联系、与自然环境的有益融合。这样的规划思想需要将建筑中的交通、功能、形象等



1. Organic cross-programming, which satisfies various demands in different time periods.
2. Increased shared urban space, emphasizing the vertical pedestrian system while organizing and incorporating the human-scale urban spaces that have historically been destroyed by motor traffic.
3. Integration of greenery, blurring the boundary between project, city and natural environment, responding to the climate and the history of the city and integrating these features into the architecture's design, shaping a regional environment character.
4. Emphasis on using streetscapes and architecture to establish the identity of the complex and integrate it with the surrounding region.

These principles have inspired the plan of Shum Yip Upper Hills. By the integration of architecture, environment and city, a district fitting into the urban context is created and enables organic combinations of urban space. For instance, effective connections with transportation systems can beneficially integrate the city with, and support the natural environment. This requires an overall re-thinking of the transportation's function, form and other architectural factors, together with the city grid and environment. The method solves urban dilemmas by building clusters while solving architectural problems in an urban perspective.

Shum Yip Upper Hills is located between two main parks in the center of Shenzhen—Lianhua Mountain Park and Biji Mountain Park—and surrounded by three main roads in the east, west and south (see Figure 1). Inspired by this, we choose “connection and composition” as the leading idea in the planning, with the goal of building connections in the space and realizing the composite of various functions in time.

First, we re-interpret the “sight corridor” in the original planning conditions into a “green corridor” connecting the two mountains. The roof terrace of the shopping mall is then converted into open space. Two ecological pedestrian and cycling paths are implemented into the west and east of the project, spanning over the main roads and connecting to the greenways in the two parks, thus integrating the project into the greenway system of the whole city. Besides sight connections, a free transfer route is created between the two mountain parks for the citizens. This seamlessly combines the functions of the complex with the city layout and extends the walking axis in the downtown of Shenzhen further to the north (see Figure 2).



Figure 2. The ecological corridor connecting the central area of Shenzhen to Biji Mountain Park (Shum Yip Land Company Limited)  
图2. 连接深圳中心区到笔架山的自然生态主轴 (出自: 深业置地有限公司)

要素与城市网络、环境整合思考, 通过建筑群体解决城市问题, 同时以城市视角解决建筑问题。

深业上城位处深圳中心区两大公园——莲花山公园和笔架山公园之间, 并被东、西、南三条城市主干道环绕 (请见图1)。受此触发, 我们确定了“联结与复合”的规划思想——在空间上实现联结, 在时间上实现不同功能的复合。

首先落实将原规划设计条件中的“视线走廊”转变成连接两个山体的实体“生态绿廊”。通过将购物中心的屋顶平台设计为开放的小镇空间, 东西各设一条配备了行人道和自行车道的生态廊桥, 跨越主干道, 与两个公园的城市绿道有机连接, 将项目本身融入城市绿道体系中。市民可以自由穿行于两个山体公园之间, 而不仅仅是视线的沟通, 让综合体功能与城市肌理完美结合, 并实现深圳市中心区原有中轴线步行系统的北延 (请见图2)。

与东西两座生态廊桥相连, 深业上城购物中心的三层屋面平台由人尺度的街巷空间围合成“特色小镇” (请见图3), 从两个山公园锻炼过来的市民, 可以在这里换件衣服, 甚至享受淋浴, 在充分接触自然的同时, 仍可在购物中心和特色小镇享受城市生活, 实现两者的完美结合, 满足现代生活的多层次需要。

在具体设计深业上城酒店宴会厅时, 因应笔架山的优美景观, 在行人可达的三层平台处, 完全架空成为观景平台, 并参考中国园林中的“借景”手法, 将建筑设计成画框形式, 既弱化了建筑体量影响, 又将远处的美丽山景融入建筑背景中 (请见图4)。

通过深业上城项目的车行和人行交通系统, 缝合目前被城市主干道分隔的地块成为整体, 让综合体功能与城市肌理完美结合。同时, 创造了连接两个山体公园的生态廊桥, 为公众提供城市休闲



Figure 3. Rendering of “Featured Town” in Shum Yip Upper Hills (Shum Yip Land Company Limited)  
图3. 深业上城特色小镇效果图 (出自: 深业置地有限公司)



Figure 4. In the banquet hall of Shum Yip Upper Hills Hotel, Bijia Mountain appears as if it is part of the building. (Shum Yip Land Company Limited)  
图4. 深业上城酒店独立宴会厅框景视角下的笔架山 (出自: 深业置地有限公司)

Connecting to the two ecological corridors, the rooftop terrace on the third floor in Shum Yip Upper Hills consists of “Featured Towns,” which are characterized by human-scaled street spaces (see Figure 3). Citizens could change clothes and even take a shower here after exercising in the parks. While remaining close to nature, people could still enjoy the city life in the shopping mall and Featured Towns, where the multilayered demands of modern life are satisfied simultaneously.

In the design of the banquet hall in Shum Yip Upper Hills Hotel, the platform on the third floor is accessible for pedestrians, its elevated position providing a viewing platform for the beautiful scenery of Bijia Mountain. Taking aspirations from the “view borrowing” in traditional Chinese gardens, the buildings are shaping into a frame that introduces the gorgeous mountain scenery and reduces the impact of the building volume (see Figure 4).

The blocks which are separated at present are woven together by the vehicle and pedestrian system of Shum Yip Upper Hills. Thus, the functions of the complex are perfectly combined with the urban texture. At the same time, ecological corridors are created between two mountain parks providing recreational space in the city for citizens. This embodies a planning concept of combining the natural environment in the city downtown with high-density artificial environments (see Figure 5).

On account of those interactions (i.e. people with architecture, people with nature, and architecture with the city) this project has shown its influence beyond the architecture itself. The shaping of the environment in a complex is inextricable from the urban context.

### Environment Design and Interaction With People

Of course, the most important design criterion is promoting the interaction between people. Urban complexes are vital and attractive because of the range of human activities they support.

The design of two Ecological Corridors (see Figure 6 and Figure 7) is inspired by the “Zigzag Bridge” found in traditional Chinese gardens.

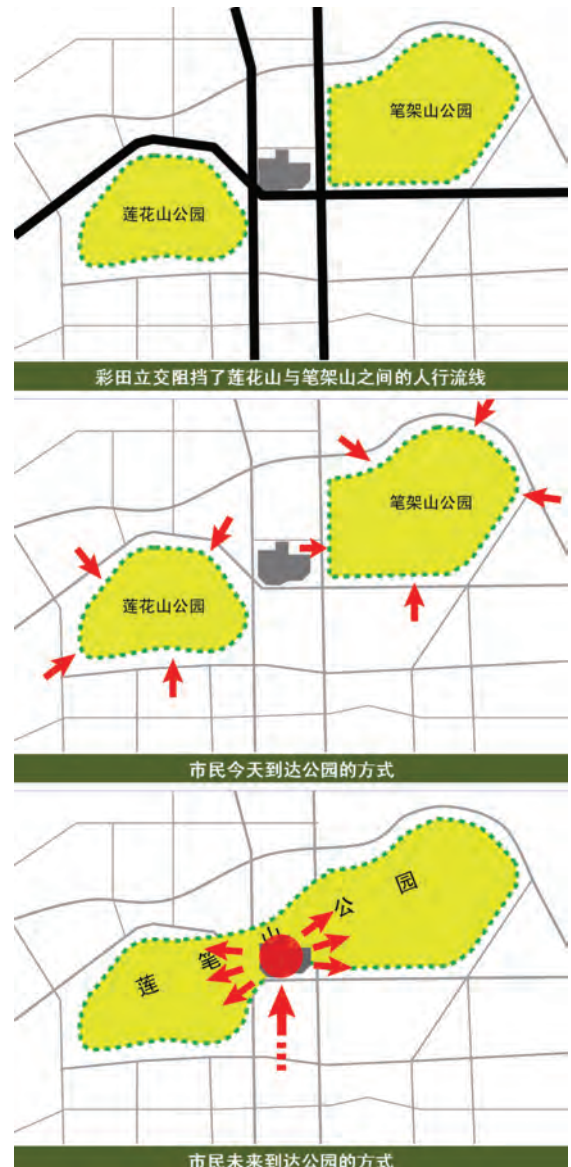


Figure 5. Means of access through Upper Hills to Lianhua Mountain Park and Bijia Mountain Park (Shum Yip Land Company Limited)  
图5. 深圳市民到达笔架山和莲花山公园的方式 (出自: 深业置地有限公司)



The circuitous path avoids a monotonous experience provided by a typical quick-access usual platform bridge, yet provides a sight-seeing route with appropriate height and open views. Pedestrians could slowly promenade in the nature and enjoy the experience of strolling in the scenery.

The Ecological Corridors adopt the gentlest slopes, which are accessible for the disabled in wheelchairs and assure that the climb is not too difficult. The design of the bridge is as simple as possible, so as to merge with its surroundings in nature.

The landscape design considers the sunlight and frequency of typhoons in Shenzhen. Designers adopt green corridors along with vertical gardens and indoor flora. Pedestrians will feel as if they are walking in a valley, because on the sides of the Corridor, the slopes formed by the structural load-carrying system provide seats and stairs for people to rest and view the scenery. At every transition point, the necessary circulation is enlarged to form a public green space; the stairs along the bridges are seamlessly connected to the parks. Further, the semi-enclosed area beneath the bridges will be transformed into sculpture parks, urban markets etc., consequently enriching the activities in the parks.

## Conclusion

Contemporary landscape design is turning the previously isolated, introverted gardens, into open and outgoing urban spaces that convert “gardens in a city” into “cities in gardens.” The open public space plays a vital role in the city system, enabling communication between people, and between society and nature. The City fosters more freedom and sharing because of modern communication technologies. For those urban complexes built at the scale of a city, there is a responsibility to fit the environment to the urban context. The urban environment is shared by the public; architectural design should merge itself into the natural environment system of the city, while taking advantage of the resources of the city.

空间，体现了中心区自然环境和高密度人工环境完美结合的规划思路 (请见图5)。

正是因为这些有趣的互动——人与建筑的互动、人与自然的互动、建筑与城市的互动，项目存在的意义便超越了建筑的本身。综合体的环境塑造离不开城市背景与视角。

## 环境设计与人的互动

当然，最重要的，还有人与人的互动。正因为人的元素，令城市综合体始终焕发勃勃生机与趣味。

目前完成设计的两条“生态廊桥”设计方案 (请见图6，图7)，灵感源自中国古典园林的曲折桥，蜿蜒曲折的流线设计有别于以往人行天桥为保证快速通过而形成的单调死板的直线型，而是借助有利的观景高度和开阔视野，让人们一边行走一边欣赏美景，从而可以放慢速度充分驻足，在不知不觉中融入自然，体验“人在景中游，景在身边移”。

生态廊桥采用了最缓的坡道，是残疾人可以推着轮椅上去的坡



Fig.6: Ecological Corridors on the east side of Shum Yip Upper Hills, connecting to Bijia Mountain Park (Shum Yip Land Company Limited)  
图6. 深业上城东面连接笔架山的生态廊桥 (出自: 深业置地有限公司)



Figure 7. Ecological Corridors on the west side of Shum Yip Upper Hills, connecting to Lianghua Mountain Park (Shum Yip Land Company Limited)  
图7. 深业上城西面连接莲花山的生态廊桥 (出自: 深业置地有限公司)

As more people move into cities, humanity has to find an innovative approach to solve the problems caused by urbanization and must face the potential future challenges, and then push the human society forward. As the development of human and society irreversibly progresses; complying blindly with nature is passive and against primary disciplines. However, the contemporary interest in environmental protection and the formation of an ecological ideology consistently remind us to re-think whether our behaviors are supportive of nature, and whether we have sufficiently incorporated nature into our urban lives.

道，保证了人们在走这条桥的时候不感觉吃力。廊桥的所有设计力求简约自然，使其充分与自然融为一体，使人们感觉它的存在并非刻意的设计，就如它本应在那里一样。

在景观设计上，设计师结合深圳地区日照强烈、多台风的特点，安排了绿廊和竖向景观围合种植，行人宛如游走于山谷之间；在步道两侧，利用根据结构受力规律自然形成的坡度，创造了供行人游憩停留、欣赏美景的座椅和台阶；在每个转折处，局部放大形成三角形公共绿化空间；分布于桥上的多处台阶与公园自然衔接，为游人自由选择上下桥提供了多种选择；而在桥下的半围合空间中，还提供了诸如雕塑公园、都市集市等多种可能性，丰富了公园的环境行为属性。

## 结论

现代景观设计将以往孤立、内向的园林转变为开敞、外向的城市环境，从城市中的花园转变为花园城市。城市公共开放空间是城市的重要组成部分。在公共开放空间里，实现了人与人、人与社会、人与自然的沟通。城市也意味着更多自由和分享，现代通讯手段和互联网的发展创造了更多的联系可能性。对于眼下动辄以城市尺度出现的城市综合体，必须以城市视角衡量综合体的环境塑造。城市环境是公共资源，建筑设计在利用城市资源的同时，也应该时刻考虑以更开放的姿态融入到城市自然环境体系。

人类进步、社会发展是一个不可逆转的历史进程，盲目顺从自然的消极观点是违背发展规律的。不过，重视自然价值和生态学的思想在不断提醒和迫使人们重新检验人类行为，是否符合自然法则和人与自然共生的法则。人们在选择居住在城市里的同时，必须思考以创新性的手段解决城市化出现的问题，还有未来可能面临的挑战，而这，正是人类进步的标志。