



作为亚洲四小龙之一的香港，在21世纪之初是否能成为可持续发展的典范，建造成为亚洲第一个当代生态城市？Vincent Callebaut Architect事务所的“香水森林”提案让我们拭目以待。

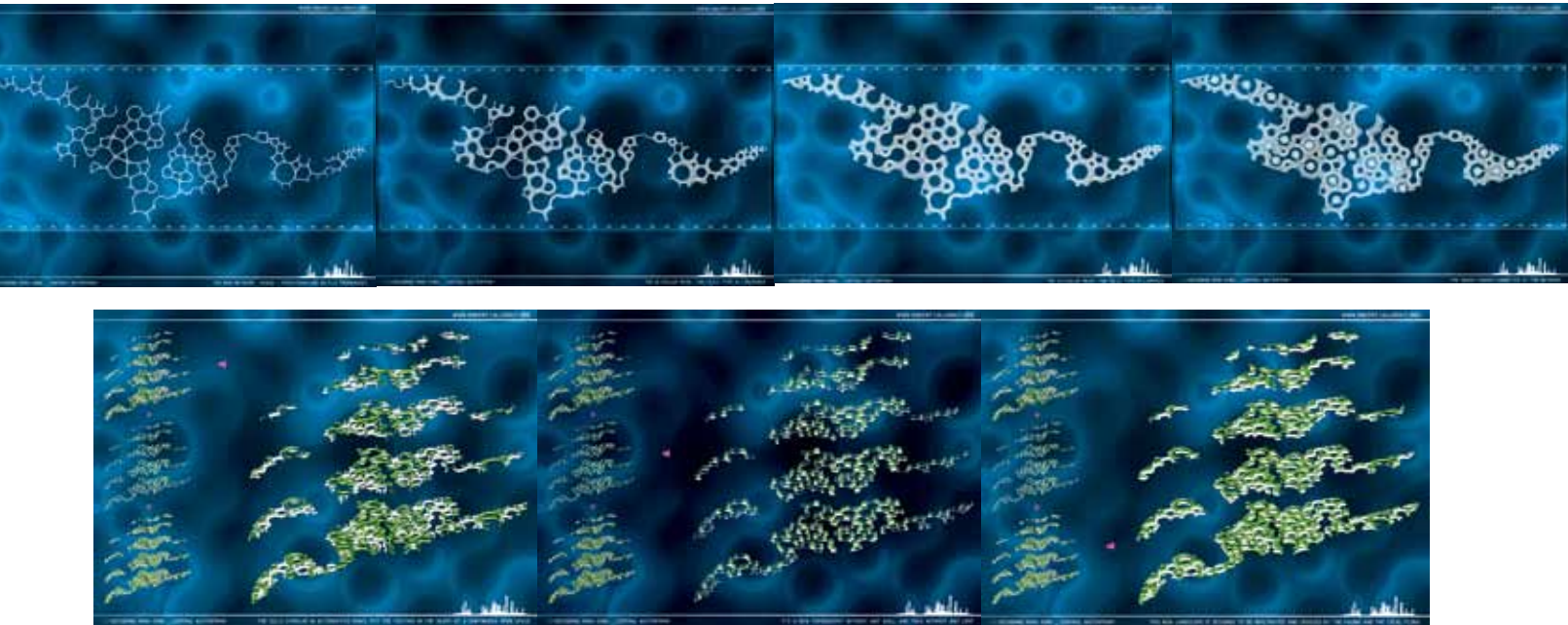
CBD城市片区周围被群山所环绕，与南向太平山被蜿蜒的西江（北方称为珠江）隔开相望。在险峻弯曲的水平层上城市只能依靠玻璃和钢铁寻求竖向发展。香港人口密度极大，达到了 30 000 人/平方千米，而土地相对较少。为了解决这一问题，“城市丛林”项目试图以扩大这个超现代城市的现有土地来重塑自然。在中国南部海域的中心，城市景观与其在中心海滨的延伸将这个“香水港口”变成城市丛林。在长期稳定的发展架构下，我们的目标就是通过采取积极的生态手段增加土地的可用性，这就意味着新的建筑必须能制造出满足自身能源消耗的能量。

#### 开放式的“细胞”组织与流动的水系互相渗透

对中心滨海区的重新定义为我们提供了理解水世界和对这种高流动性进行重新解码的机会。类似串联“细胞”组成的连续层级定义了一种新的生态基质，并揭示出此项目的特点。实际上，每一个不规则的胞体都能够使得水渗透到已经存在的城市肌理的最深处直至中环添马舰广场。这些片体悬浮在维多利亚港岸边，肢端错综复杂的波浪状交通整合了包括机场快轨、地铁、轮渡、私人游艇、中环湾仔绕道、各种环路、特许和非特许经营巴士与小巴士等各种出行方式。







这些“胞体”交替式横列重叠，人在连续的开放空间中心行走时可以穿梭于露天游泳池、游艇码头和海滨、码头、沼泽、生物净化泻湖、海洋博物馆甚至水下歌剧院的步行与自行车道。在九龙半岛的天际线，瀑布和梯田丰富了第五立面。这种新的地势因无墙体的限制，形式也变得更加自由。这里不仅是香港市民的栖息场所，而且也供各种动物穿梭、植物生长，并为它们提供移居的场所。这是一种新的生态系统，从东到西与中环轮渡码头、国际金融中心、香港市政厅、马戏团广场、香港演艺中心、香港会展中心和湾仔运动场等呈网络状相连。

### 树塔净化空气

植根于中国南海深海中，这些化工技术有机高塔从水面直冲蓝天。塔楼似多根茎的植物，结构沿主干在竖向延伸，树状分支纵横交错成网状。在这些分支周围，渔网状的高环保幕墙像礼服一般悬挂其上。“渔网”所形成的规则像素网格随机被肥料和垫子填充，而这些肥料也使得植物更加茂盛。这种空间形体使得生态塔楼兼具两种功能：在被称作“内部”的空间里，树木将被用来打造房间的私密性，而在被称作“外部”的空间，这些分支将被用于政府服务和休闲功能。功能的不同也适应了CBD区域的特点，在夜晚又被新的社会交流生活所代替！

由于地处亚热带，冬季气候非常干燥，这些被公路和人行道组成的路网连接的树状塔楼真正变成了立体公园，同时带有强烈的族群认同感。蜿蜒曲折的线条与中国的彩陶艺术相呼应，却通过与其后方区域的活力对比来区别出自己感性的一面。在中国的建筑项目中，被绿色纤维编织覆盖则有另一层的隐喻：建造过程中经过生物与植物的启发，它们变成了充满生命力的建筑。根据美林集团投资银行的数据，相对于新加坡而言，空气污染强烈地降低了香港的竞争力，甚至在港从业人员及他们的家庭宁愿离开香港以维护身体健康。为了与污染抗争，通过生态塔楼的新陈代谢作用将使香港净化：吸收排放的二氧化碳，释放氧气，通过热电联共生产电能或热能并入到城市网络之中。（译/李昭君）

Near Singapore, South Korea and Taiwan, the economical development of Hong Kong made it one of the four Asian dragons. But in this beginning of the 21st century, will it also dare to be the first to build a contemporary Ecopolis by showing the example of the long lasting development?

The urban mesh of the Central Business District is surrounded by the green hills visible from the Victoria Peak in the South and by the sinuous bank of the Xī Jiāng, also called the Pearl River in the North. On the horizontal stratum compressed along the curves of the levels of the precipitous relief, the city structured itself vertically through a field of more or less frayed towers of glass and steel. Hong Kong is one of the more populated territory in the world with a density of 30 000 inhabitants/km<sup>2</sup>. To answer to this overpopulation, the project «Urban Jungle» proposes to re-tame the nature and to widen the territory of the ultra-contemporary city. In the heart of the South China Sea, this «perfumed harbour» will abound in an urban jungle by the renaturalisation of the urban landscape and its extension on Central Waterfront. In the framework of the long lasting development, the goal is thus to increase the real estate availability by setting up an ecologically positive strong print. This means so that the new built spaces are auto-sufficient and produce more energies and biodiversity that they consume!

### The Alveolar Mesh Opened to the Constant Flows

The redefinition of the Central Waterfront offers us the opportunity to understand the aquatic world and to retranscribe it by liquid spaces with high fluidity. A continuous layer pierced of cells redefines thus a new ecologic substrate to the elaboration of this project. Actually, a mesh of irregular cells enables the water to infiltrate in the deepest of the existing urban fabric and its hollow teeth to the Tamar Site overriding the Tun Wo Lane. This mesh hangs to the bank of the Victoria Harbour to the bottom of the towers. By undulatory circuits ramifying and refining at its extremities, this multimodal layer integrates all the relevant modes of transport including airport rail, underground rail (MTR), ferries/fast boats, private yachts, the Central-Wanchai Bypass, various circulation roads, franchise and non-franchise buses and minibuses.

The cells overlap in alternate rows and put the visitors in the heart of a continuous open space fluctuating between open-air swimming pools, marinas, kilometres of new quais and pedestrian or bicycle promenades in the seafront, piers, swamps, lagoons of biologic purification, oceanography museums or even subaquatic operas. In front of the skyline of the Kowloon peninsula, a true cascade of aquatic and vegetable terraces like the ones of a rice terrace are layed out on this fifth façade. This new topography, without any wall, thus without any limit, is not only meant to be inhabited by



the citizens of Hong Kong but is also designed to be infiltrated, crossed and printed by the numerous species of the fauna and local flora or in migration that will come to install themselves. It is thus finally a new ecosystem linked to the networks that will progressively set up embracing from East to West the piers of the Central Ferry Terminal, the IFC Tower, the Hong Kong City Hall, the Circus Plaza, the Hong Kong Academy for Performing Arts, the Exhibition and Convention Center and the Wanchai Sports Ground.

#### The Tree Towers Recycling Atmosphere

Drawing their roots in the deepest of the South China Sea, a field of techno-organic towers dashes from the water towards the sky. These towers develop themselves as true trees multiplying in rhizomes. Actually, their structure grows vertically along the trunk on which many arborescent branches ramify. Around these branches a fishnet dress profiling the highly environmental façades hangs up. The regular pixels formed by this fishnet are closed on a random way by cushions of substrate and vegetable fertilizers enabling the development of a luxuriant vegetation. The spatial configuration of these ecological towers offers them a double function. The spaces called « inside » the arborescence will be dedicated to the private sphere of the housing whereas the spaces called « outside » the branches will be dedicated to the bureaucratic service sector and the leisure. This diversity of functions tends

to answer to the nocturnal paralysis from which the Central Business District suffers, hollowing out at night by a new social vitality of exchanges and interconnexions!

Under the subtropical climate with dry winter, the arborescent towers linked together by a road and pedestrian network changes thus into true vertical gardens with strong ethnic identity. Echoing back to the art of the Chinese faience with sinusoidal curves, they contrast by their sensuality with the surrounding rigour of the back-field built in barcodes. Metaphor also of the Chinese projects covered by a linen woven of green fibre, these are living architectures with processes inspired of the biology and the botany. According to the investment bank Merrill Lynch, the atmospheric pollution in Hong Kong decreases strongly the competitiveness of Hong Kong, especially in front of Singapore. The workers of Hong Kong and their families preferring leaving Hong Kong to preserve their health. To fight against the pollution, the metabolism of these new ecological towers will thus enable the city of Hong Kong to purify and simultaneously recycle the rejections of CO<sub>2</sub> contained in the atmosphere into oxygen by photosynthesis and to produce by cogeneration (from combustible rejections) electrical energy or thermal energy to reinsufflate in the urban network. 