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Author:	Travis Soberg, Principal, Goettsch Partners
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From Meadows to Megacities: Creating Urban Density in the Pearl River Region | 从平原到巨型都市：在珠江三角洲区打造城市密度



Travis Soberg
Principal | 总监

Goettsch Partners
Goettsch Partners建筑设计
事务所

Chicago, USA | 芝加哥, 美国

Travis Soberg is a Principal and Director of Sustainable Design at Goettsch Partners. He brings 18 years of professional experience, having worked on some of the company's most prominent projects. With the growth and expansion of the firm's international work, Soberg currently leads and coordinates many projects in China, including large-scale commercial office, hotel, and mixed-use developments. His recent work in China includes the China Resources Nanning building, Nanjing Jin Mao Plaza tower, and the China Horoy Qianhai Guanze tower.

Travis Soberg是美国GP建筑设计有限公司董事兼可持续发展设计总监。Soberg 先生有18年专业经验并参与很多公司的重大项目。随着公司不断扩大国际项目业务，Soberg先生目前领导和协调中国的许多项目，包括大型商业办公建筑、酒店、和混合用途的开发项目。他近期在中国的作品有中国华润南宁大厦、南京金茂广场大厦和中国前海鸿荣源冠泽金融中心。

Abstract | 摘要

The Greater Pearl River Delta region emerged as a result of China's 1979 reform policies. Within the last 20 years, the GPRD has grown from a population of less than 10 million people on 4500 sq km of land to over 42 million people on 7000 sq km of land; in the process becoming the world's largest urbanized region on the planet.

For designers of vertical tall buildings, how do we create instant urbanized cities from what was recently meadows or reclaimed land? What are the considerations for creating vibrant, healthy, sustainable environments which have historically developed over decades and complete them within a decade? How do these newly formed urban centers then connect regionally with other newly formed urban centers into a modern mega-region? This paper will use case studies from the GPRD region to understand planning methodologies and considerations used in turning rural farmland into dense urban centers.

Keywords: Density, Supertall, Sustainability, Urbanization, Vertical Urbanism

大珠江三角洲地区是中国自1979年改革开放政策的开发特区。在过去的20年中，大珠江三角洲地区已经从人口不足10万，占地4500平方公里，增加到人口超过4千2百万，占地7000平方公里的特区；在这个过程中，它成为世界上最大的城市化地区。

对于设计垂直建筑的设计师，我们应该如何从不久前的平原或填海得到的土地上瞬间建设已经城市化的城市？在几十年间创造像经过千百年历史形成的城市那样有活力、健康、可持续的环境的依据是什么？这些新形成的城市中心如何与其他新形成的城市中心在地域上联系并形成一个现代的超级区域？这篇文章将运用大珠三角地区的案例来理解将农村耕地变成高密度城市中心的规划方法和依据。

关键词：密度、超高层建筑、可持续性、都市化、垂直城市化

The Pearl River Delta

The Pearl River Delta slips into the sea at the southeasternmost corner of mainland China. Isolated from the rest of the country by the "Five Ranges" of the Nan Mountains to the north, the Delta forms an estuary basin of low lying flatlands chiseled by the confluence of its four major rivers; including its namesake Zhu, or "Pearl," River. Within the basin, a series of smaller canals, streams and rivers crisscross the delta and create a network of ancillary waterways which further facilitate the seeping of fresh water into the sea.

This network of waterways knits its way through the entire region, veining the land and creating a blanket of naturally fertile soil. While the waterways unite the delta into a singular geography, they simultaneously divide the land into definable parcels and form a quilt of individually inhabited territories. Despite this regionally inherent dichotomy of uniformity and separation, the Pearl River Delta has emerged from the isolated meadows and villages of its past to

珠江三角洲

位于中国大陆最东南端，珠江三角洲东、西、北三面有山地、丘陵围绕，南面向海，四条主要河流的交汇处的河口盆地形成三角洲独特的地貌，包括其名字的由来—珠 或“珠”江。在盆地范围中是一系列小运河及溪流，河流纵横交错形成流入大海的淡水水系。

水道网络贯穿整个地区，成为土地的经络，创造自然肥沃的土壤。水道与三角洲结合形成独特的地貌，同时划分土地成为可定义的地块。尽管其自然地理特征中的分割与分隔，珠三角已经从平原丘陵及过去散落的村落，发展成为意义深远的实体：领先全球的特大城市。然而，是否在传统意义上，仍可以看作一个单独的城市，具有凝聚力的个性和明确定义的核心？还是另一种选择单独城市甚至区域相互结合成一体但仍保持自己的个性与特征？如何可能珠三角从偏远的小村庄演变成世界上人口最稠密地区之一？

虽然广州一直被认为是珠三角地区的经济核心，该地区的巨变是出于当时总理邓小

become a singularly profound entity: the world's leading megacity. Yet can it truly be considered a singular city in the traditional sense; one with a cohesive character and a clearly defined centrality? Or is there another option where individual cities and even districts are connected cohesively together as one but maintains their individual character and quality? Is it possible that the very nature of the Pearl River Delta is what enabled the region to rapidly transform from small remote villages into one of the most densely populated regions in the world?

While Guangzhou has long been considered an economic anchor of the Pearl River Delta, the meteoric rise of the region is widely attributed to the vision of then Premier Deng Xiao-Ping's 1979 creation of the Shenzhen Special Economic Zone. Within the borders of Special Economic Zone (SEZ), policies were revised to allow foreign investment and trade to occur without the usual oversight of the Chinese central government. This shift in policies within the boundaries of the SEZ enabled China to experiment with an opening of their economy to foreign trade but within a controlled environment.

In the 1970's neighboring Hong Kong enjoyed a strong global position as a major exporter of materials and manufactured products to the world. However rising labor costs and limited land availability hampered its ability to continue growing economically. Under British rule at that time, and considered a foreign entity, it was also unable to capitalize on its proximity to mainland China prior to the creation of the Shenzhen SEZ. With the implementation of China's 1979 reform policies, Hong Kong was able to shift its manufacturing production to mainland China, capitalizing on lower wages and abundantly available land. In fact, from 1980 through 2000, Hong Kong was directly responsible for over 70% of foreign direct investment into the mainland Pearl River District (Enright, 2005).

With the SEZ policies removing many of the economic barriers to foreign investment and Hong Kong able to provide a significant amount of capital to the mainland Pearl River District, the region began its rapid ascent to urbanization. In 1980, the populations of Shenzhen, Guangzhou and Hong Kong stood respectively at 300,000, 1.87 million, and 5.06 million people. Thirty years later, the respective populations are estimated to be 10.22 million, 9.62 million, and 7.2 million people with the entire region estimated at a combined 45 million people (Statista, 2016).

Yet even with the highly concentrated influx and limited border crossings from

neighboring Hong Kong, the urbanization in the Pearl River Delta did not take on a traditional mono-centric city development as would be expected. Instead, urbanization occurred in the form of many smaller cities and villages which were densely connected but individually maintained. In fact, by the early 1990's, it is estimated that more than 400 individual villages within the Pearl River District existed, with populations varying up to 10,000 people each (Yin, 2012). This poly-centric model of villages was a natural continuation of the geographic and settlement patterns of the region; growing not concentrically from a single center but as a quilt of individual communities across the land.

As the populations continued to grow through the decades, modern comprehensive master plans attempted to formalize growth and create centrally controlled organization. However the master plans were unable to anticipate the unprecedented migration of people to the delta region. As an example, the 1986 Master Plan of Shenzhen Special Economic Zone initially planned for a population of one million people by the year 2010. In fact, by the time the master plan was published, the city was already nearing a population of one million. By 2010, Shenzhen exceeded 10 million people (Du, 2010).

With large, formal master plans unable to keep up with the reality of the urban growth, smaller district plans have become the blueprints for manageable development. These smaller districts follow the conceptual idea of the self-sustaining villages and fit more naturally into the organic growth of the region. Similarly to the villages that preceded them, each district is devoted to individually specific industries, functions, or companies and creates its own uniquely distinct characteristics. While the districts remain intrinsically individual, like the permeated delta region they inhabit, they are integrally linked together through modern rapid transit systems and create a fluid movement of people and products throughout the greater Pearl River Delta.

Guangzhou Zhujiang New Town, Case Study

Zhujiang New Town is located in the Tianhe District of Guangzhou. Covering 6.5sq km, it is a former agricultural area whose rapid development was spurred by the selection of Guangzhou as the host of the 2010 Asian Games. At the heart of New Town is Zhujiang Park, which divides the master plan into

平在1979年对创建深圳经济特区的展望。经济特区（SEZ）范围之内，修订政策，允许外国企业投资及贸易往来无需经过中国中央政府的监督。这一在经济特区范围的政策转变使中国尝试在可控环境中探索经济上外经济贸易的开放。

在1970年代，相邻的香港在材料和制造的产品出口上占全球领先地位。劳动力成本上升但与有限的土地供应制约其继续增长的经济能力。在当时英国的统治，并考虑为外企，也无法利用其背靠中国大陆之前，创建深圳特区的。随着中国1979年改革开放政策实施，香港能够将其生产制造移到中国大陆，从较低工资和大量可用土地获利。事实上，自1980年至2000年，香港占超过70%的流入内地珠三角地区外资。

在特区政策取消了许多对外国投资的经济障碍，并且香港能够提供内地珠三角地区显著增加投资的情况下，该地区开始加速城市化。在1980年，深圳、广州和香港人口分别为30万、1.87百万和5.06百万。三十年后，相应人口估计为1.022千万，9.62百万和7.20百万，整个地区综合人口数量估计约为4千5百万。

然而，即使从相邻香港大量涌入和有限的边境口岸，珠三角城市化并没有如所预料的按传统单一核心的中心城市发展模式发展。相反，城市化发生在许多较小城市和乡村，虽高度连接但保持独立。事实上，在1990年代初期，据估计，珠三角地区内有超过400多村庄，与人口高达每个1万人。这种多核心的村庄模式是地区地理和居住模式自然延续；不是从单一中心同心向外扩展，而是在整个地区均匀以单独的社区分布。

随着人口在几十年中继续增长，现代化综合性总体规划试图控制形态发展并建立集中控制的组织。然而，总体规划未能预见三角洲地区前所未有的迁入人口。例如，1986年深圳经济特区总体规划最初计划人口在2010年达到一百万。事实上，在总体规划公布时，城市人口已经接近一百万。到2010年为止，深圳人口已超过一千万。

在大型综合总体规划无法跟上城市发展的实际情况下，较小的区域平面成为控制发展的蓝图。这些较小的地区按照自持村庄的概念想法，更自然地融入该地区的有机发展。与其之前的村庄相似，每个区域投入专门的行业、功能，或公司企业，并创建了自己独特的个性特征。虽然各区保持本质的个体，就像他们所居住的通透的三角洲流域，通过现代高速公交系统联系成一个整体，并在整个大珠三角区域打造人与产品的流通。

residential developments on the east and a modern central business district to the west. The “central park” forms a strong north south axis which is framed by perimeter high rise buildings along its eastern and western edges and culminates at the Pearl River’s Haixinsha Island to the south (Figure 1).

While Zhujiang Park is the centerpiece of an entirely new development, its design incorporates many qualities and characteristics of its former village existence which allows it to feel modern yet simultaneously contextual. Vehicular roads are located below ground in order to create a completely pedestrian oriented site. Small scale shops and restaurants are scattered throughout the landscape and form intimate gathering points surrounded by native planting. Modern services such as parking, subway stations, and large scale retail are located underground and accessed via sunken gardens in order to preserve the natural setting within the park. Along the perimeter, tall buildings emerge directly from the gardens without formal separation and cultural institutions dot the river’s edge as if they had been eroded there through time.

Within this setting stands R+F Yingkai Square, a 296m high mixed-use tower located in the southwest quadrant of Zhujiang Park. Designed to resemble the organic growth of bamboo, the tower’s silhouette is asymmetrically notched and creates a distinct presence unlike any other tower on the city skyline. While significantly tall enough to be considered within the overall context of Guangzhou, the tower’s true manifestation is firmly rooted within the immediate contextual qualities of Zhujiang New Town (Figure 2).

Emphasizing its relationship to Zhujiang Park and the former agricultural fields which occupied the land, the façade of Yingkai Square is designed to emulate the natural growth of vegetation as it emerges from the



Figure 2. R+F Yingkai Square. Designed by Goettsch Partners. (Source: Goettsch Partners)
图2 富力盈凯广场，由美国GP建筑设计有限公司设计（来源：Goettsch Partners）

广州珠江新城，案例分析

珠江新城位于广州天河区，占地6.5平方公里，由于广州被选择举办2010年亚运会，从原先农业区快速发展的新城市。在新城的中心地带是珠江公园，在总体规划中，东面为住宅区，西面成为现代化的中央商务区。“中央公园”形成南北轴，由沿

东和西边缘的周边高层建筑分界，并在南面珠江的海心沙形成空间序列的高潮（图1）。

虽然珠江公园是一个全新发展的中心，其设计融入了许多原有村庄的特征，这使得它觉得现代而不失与周围环境的联系。车道都位于地面以下，在地面上形成完整的步行空间体系。小规模商店和餐馆散落于景区之中，形成亲切近人、环境优美的聚会空间。现代服务，如停车场、地铁站和大型商场均设置在地下，并通过下沉式花园与地上相通。沿着周边，高层塔楼直接从花园显现出来，而没有规则的分隔，文化设施散落于河边，犹如从时间中衍生出来的一样。

在此之中为富力盈凯广场，总高达296米的多功能综合体建筑，位于珠江公园的西南部分。设计犹如上升的竹节，塔身上不对称地设置切口，在城市天际线中形成独一无二的建筑形象（图2）。

强调建筑与珠江公园和之前为农田的关系，盈凯广场的外观设计模仿植物的自然

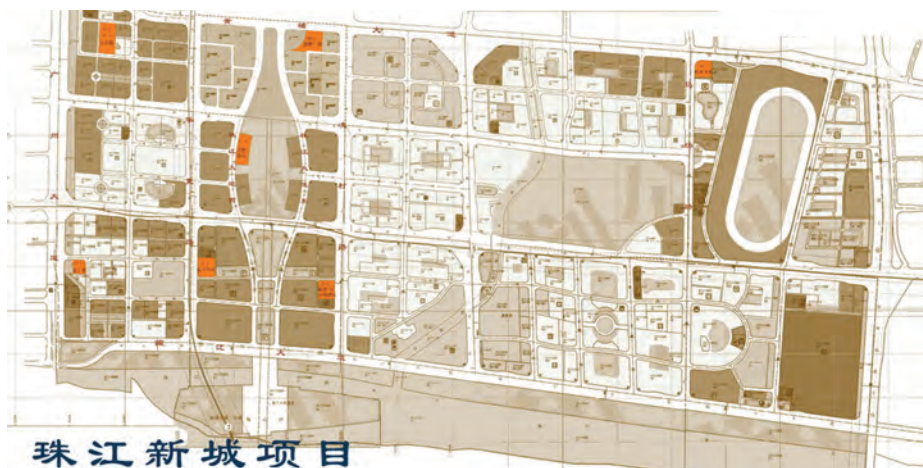


Figure 1. Guangzhou Zhujiang New Town (Source: R+F)
图1 广州珠江新城（来源：R+F）

earth. Clad completely in stainless steel at its base, the tower façade creates a dense solidity and visual stability which grounds the building to the site. As the facade rises skyward, the density of the stainless steel begins to open up and elongate until it resembles fibrous strands which knit their way through the inner volume of crystalline glass. The reflectiveness of the low-e glass further accentuates the skyward summing of the building's form (Figure 3).

Rigorously square in plan to respect the gridded streetscape of adjacent roadways, the base of the tower is sited in concert with adjacent buildings to formulate cohesive urban spaces at the pedestrian level. As the tower emerges above the rooflines of the surrounding podium buildings, the diagonal site lines to Zhujiang Park and the Pearl River are recognized through the articulation of the building massing. The towers corners are "carved" or pinched inward 3.5m at alternating sides in order to create floor to ceiling picture windows which tilt directly toward the significant contextual elements.

While organic in appearance, each pinch is meticulously choreographed to reveal the extents of the internal programmatic stacking, or vertical villages, within the overall building. In this way the building articulation is simultaneously informed by the surrounding context while informing the surroundings of its internal arrangement. Programmatically, the tower integrates retail, office and a Park Hyatt Hotel; with the Park Hyatt occupying the highest floors and culminating in an outdoor rooftop garden. The tower also features a direct internal link to the city's subway system, allowing occupants to seamlessly connect from Zhujiang New Town to the larger region of the Pearl River Delta. Planned sky bridges at level 02 further connect Yingkai Square with the adjacent towers.

Poly Pazhou, Case Study

Pazhou is an island village within the Pearl River which lies immediately east of Zhujiang New Town. Consisting of only 15sq km of land, Pazhou's history is intimately tied to its water based location. For nearly 100 years during the Qing Dynasty, Pazhou's Huangpu port was the only port allowed open to foreign merchants, giving Guangzhou access to foreign trade (Nan, 2016). In 1600 the Pazhou Pagoda was built on a knoll as a Buddhist landmark and served double duty as navigation point for merchant ships along the Pearl River. Today the Pazhou Pagoda continues to create a significant focal point for Pazhou, though its

use as a maritime navigational aid has been dwarfed by the nearby developments.

In 2010, a 750,000sqm site immediately east of the Pazhou Pagoda and bordering the north shore of the island was master planned for redevelopment. Connected to the main city of Guangzhou by two vehicular bridges and two subway lines, the area was envisioned as a regional CBD for the Pazhou area. Within the larger master plan, four distinct zones programmatic zones were identified: retail/apartment, high end residential, commercial business, and an area to be returned to the original village owners as compensation for their land; which contained a mixture of retail, residential, and a neighborhood school.

The site is bounded by the Pearl River on the north, Line 4 subway to the east, Xingang Road to the south, and Pazhou-ta Park to the west. Within Pazhou-ta Park, the Pazhou Pagoda is located at its southern end, directly adjacent to the southwest corner of the development site. Within the development site itself, an interior canal exists which arcs

growth. The base is completely clad in stainless steel, reflecting the building's solidity and visual stability. As height increases, the facade gradually transitions from dense stainless steel to transparent crystalline glass. The further the building protrudes from the surrounding context, the more pronounced the building's upward form (Figure 3).

Strict square plan and adjacent road grid respond, building location and adjacent building unified, on the ground layer forming a pedestrian friendly urban space. Due to the building rising above the surrounding podium buildings, the building's fine detail can be seen from the Pearl River and the Pearl River Park. The building's corners are "cut" or "pinched" inward 3.5m at alternating sides, forming a slanted high view window directly corresponding to the surrounding landscape resources.

Despite its natural organic appearance, every corner is the result of careful planning, reflecting the overall building's functional zoning. In this way, the building's form expresses both its environmental impact and its influence on the environment. The building combines commercial, office and hotel functions; the hotel is located on the top floors, the outdoor rooftop garden is on the top floor. The building is also directly linked to the city's subway system, providing convenient access to the Pearl River New Town and the larger Pearl River Delta region. On the second floor, a sky bridge is set to further enhance the connection between the building and the surrounding landscape.



Figure 3. R+F Yingkai Square. Designed by Goettsch Partners. (Source: Goettsch Partners)
图3 富力盈凯广场，由美国GP建筑设计有限公司设计（来源：Goettsch Partners）

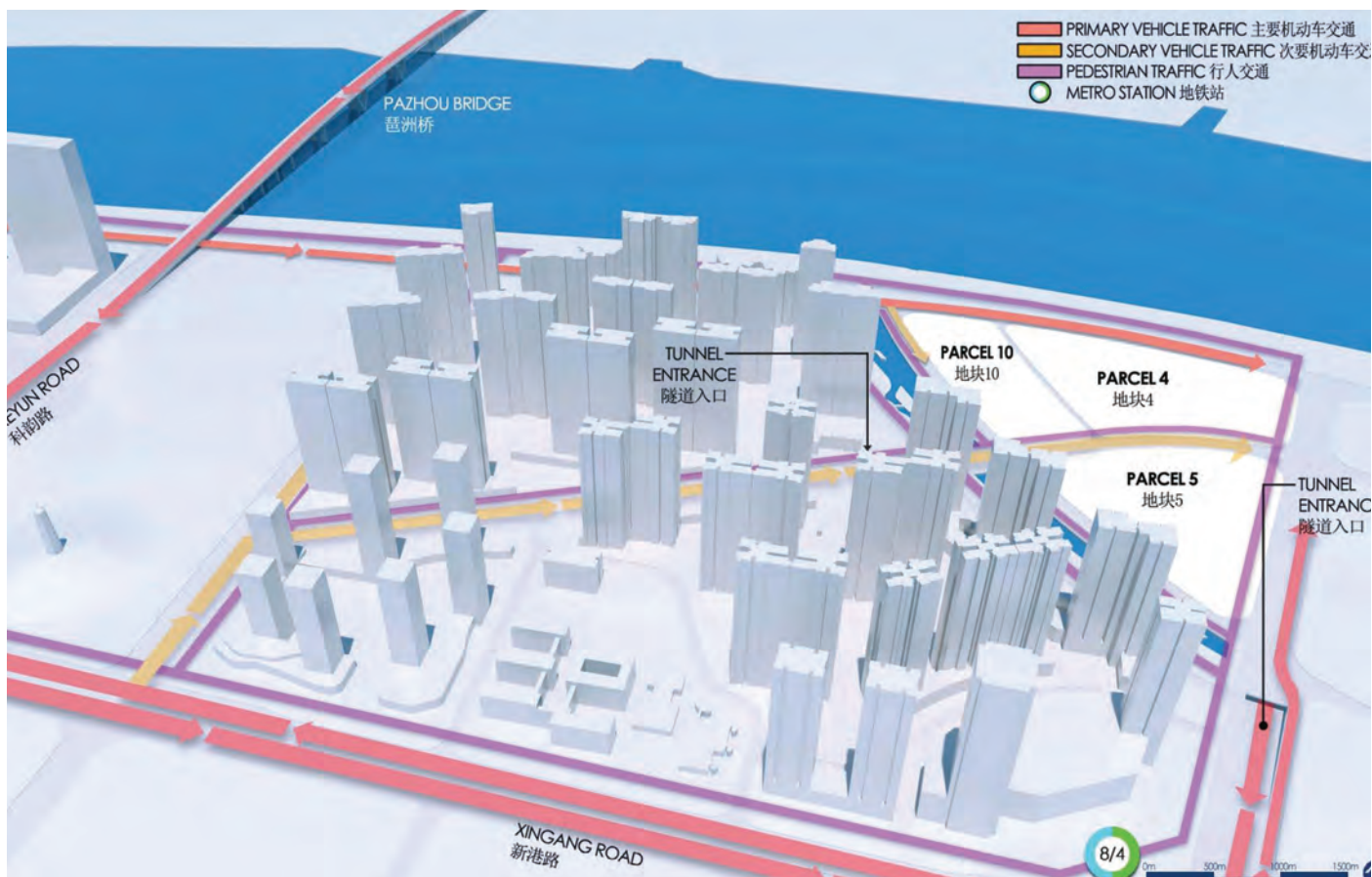


Figure 4. Poly Pazhou. Designed by Goettsch Partners. (Source: Goettsch Partners)
图4. 保利琶洲，由美国GP建筑设计有限公司设计（来源：Goettsch Partners）

across the site from middle-north to middle-east sides, isolating the northeast corner from the remainder of the site (Figure 4).

In crafting the comprehensive master plan for the redeveloped village, several fundamental goals were identified:

1. Respect the cultural heritage of Pazhou and its landmark pagoda
2. Anchor the complex with a landmark tower
3. Emphasize views to the adjacent Pearl River
4. Create easy access from the commercial district to the subway system

In order to respect the cultural heritage of Pazhou and honor the landmark pagoda, it was determined that a formal axis should be drawn through the site which terminates at the pagoda and establishes a previously unavailable view the historic landmark. Considering the pagoda's location at the southwest side of the site, a diagonal axis was created which stretched from the southwest to northeast corners. By creating a diagonal through the site, the new axis allowed the added benefit of ensuring all four

programmatic zones would benefit from the arrangement.

At the opposite end of the diagonal axis the landmark tower was located, creating a direct dialogue between the historic pagoda and the new landmark. With its location along the Pearl River's edge, the landmark tower becomes not only an anchor for the new development but a beacon for the whole of Pazhou. Much like the historic pagoda had done during the Qing Dynasty, the landmark towers' arrangement broadcasts the presence of Pazhou within the Pearl River to the greater city of Guangzhou.

Considering the unique geography of Pazhou as an island within the river and its long history of port culture, it was critical that the new development embrace its distinctive characteristic. To achieve this goal, all building locations were staggered to create unencumbered view corridors of the river front. The master plan further required all low level buildings along the river to be elevated in order to ensure not only a visual connection from the interior of the site to the river, but unobstructed access for the developments occupants.

By locating the landmark tower in the northeast quadrant, the existence of the

保利琶洲，案例分析

琶洲是珠江中的一个岛屿村庄，位于珠江新城东面。用地只有15平方公里，琶洲的历史与其在水面上的位置紧密相连。在清代近100年中，琶洲的黄埔港是唯一对外开放的港口，使广州能对外贸易（Nan, 2016）。1600年，琶洲塔建在山丘之上为佛教中心，又为珠江上的商船导航。如今，它虽然横穿中-北部至中-东部，把东北角和基地剩余部分分隔开来，但琶洲塔继续为琶洲著名的景点（图4）。

在琶洲村重建的总体规划中，确定了以下基本目标：

1. 尊重琶洲文化遗产及标志性琶洲塔
2. 在综合开发项目中打造标志性塔楼
3. 强调相邻珠江景色
4. 商业区与地铁系统方便衔接

为了尊重琶洲的文化遗产和著名的琶洲古塔，确定穿过场地的中轴线终止在古塔位置，并形成之前没有的景观轴线。在场地西南侧考虑到古塔位置，对角轴线从西南连接东北。通过建立穿过场地的对角线，新轴还有利于布置四个功能分区。

在对角线轴另一端的地标塔楼，建立与古塔和新地标之间的直接对话。沿珠江边缘

internal canal naturally nests the remainder of the commercial district into this quadrant of the site (Figure 5). However, the single subway station for the village is located in the southeast corner. It was therefore determined that an underground passageway would be built which connects directly from the subway station to the basement levels of commercial office towers. Through this arrangement, the connected village concept was maintained, allowing the development to emphasize the qualities which make it uniquely special while participating in the greater networked economy of the delta region (Figure 6).

Qianhai, Case Study

When the Special Economic Zone of Shenzhen was created in 1979, the economic policies of the region were revised to promote direct foreign investment into mainland China. However, the policies did not include the ability for China's currency, the renminbi, to be used outside of its borders. In an effort to internationalize the renminbi, the Chinese government established the Qianhai Bay Special Economic Zone in 2012 for the purpose of opening up cross-border loans between Hong Kong and Qianhai, among other business centric incentives (Zialcita, 2015).

Created almost completely from reclaimed land, the 15sq km area of Qianhai is located at the westernmost end of Shenzhen's SEZ within the Nanshan district. Virtually flat and without any history of settlements, the Qianhai Bay SEZ exists beyond the traditional cultural references of the Pearl River Delta and presents itself as an opportunity to explore new development concepts, not unlike the purpose of the Special Economic Zone itself. The question is what should these new concept be? What factors should be considered influential enough to cultivate a completely new financial district? The answers are found by looking at both the isolated specifics of the Qianhai Bay development as well as its role within the larger Pearl River Delta.

Within Shenzhen's overall SEZ, Qianhai's role is to serve as intermediary for financial trade between the western world and mainland China. It was therefore fundamental that the planning of the new district support this merger of ideas and create, in essence, an international financial district with distinctly Chinese characteristics. To this extent, a series of considerations were utilized:

- A district devoted to the financial industry but designed as an integrated community, much like the traditional villages of the delta region. Office towers were

位置，地标大楼不仅展现新开发项目的形象，而且成为整个琶洲的灯塔。就像清朝羊城八景之一的古塔，地标塔楼成为珠江在广州大都市地区的新标志。

考虑到琶洲独特的岛屿地理环境，其历史悠久的港口文化，新开发项目需要体现其鲜明的特点。为了实现这一目标，所有建筑交错定位提供景观视线走廊。总体规划还要求沿江建筑高度较低，以确保从场地内部能与江景建立视觉连接。

通过将标志性塔楼定位在场地东北角部分，内部河道自然将商业区引入场地当中（图5）。由于地铁站位于东南角，因此建立地下通道连接地铁站和商业办公楼地下部分。这样布置既保持村庄的概念，又强调与三角洲经济特区的联系（图6）。

前海，案例研究

当深圳经济特区于1979年创建时，对该地区的经济政策进行了修订，鼓励外资企业直接投资中国大陆。然而，政策并没有考虑对中国货币—人民币在其国境之外使用的的能力。在使人民币国际化，中国政府在2012年成立了前海湾经济特区，鼓励香港和前海之间进行跨境贷款等商务活动。

完全建立在填海用地上，15平方公里的前海地区位于深圳经济特区南山区最西端。前



Figure 5. Poly Pazhou. Designed by Goettsch Partners. (Source: Goettsch Partners)
图5. 保利琶洲，由美国GP建筑设计有限公司设计（来源：Goettsch Partners）

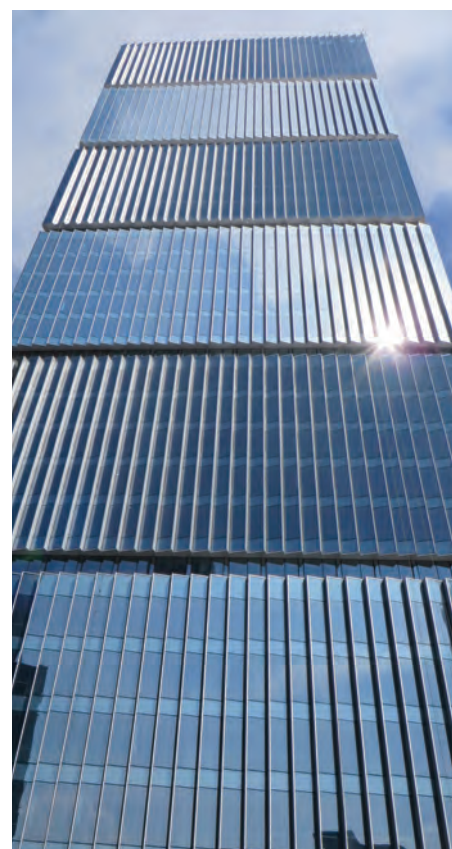


Figure 6. Poly Pazhou. Designed by Goettsch Partners. (Source: Goettsch Partners)
图6. 保利琶洲，由美国GP建筑设计有限公司设计（来源：Goettsch Partners）



Figure 7. China Horoy Qianhai Guanze Mixed-use Tower. Designed by Goettsch Partners. (Source: Goettsch Partners/LEED8)
图7. 前海鸿荣源冠泽金融中心，由美国GP建筑设计有限公司设计（来源：Goettsch Partners/LEED8）



Figure 8. China Resources Qianhai Center. Designed by Goettsch Partners. (Source: Goettsch Partners)
图8. 华润前海中心，由美国GP建筑设计有限公司设计（来源：Goettsch Partners）

programmatically integrated with retail, residential, and hotel towers to create a modern, independent village (Figure 7).

- Convenient, gridded streetscapes were employed to provide formal business entrances for the office towers. Intertwined within the resultant city blocks, meandering retail corridors with cultural centers, public performance amphitheaters, and multi-tiered dining terraces create a less formal path through the district (Figure 8).

- Efficient, modern towers with international standards for interior environments were designed to facilitate the needs of international businesses. Combined with these standards were distinctly Chinese preferences for sunlight, fresh air, and communal spaces.

- Modern services and technological systems were used to create a controlled and reliable setting for daily activities which minimize the disruptions from nature's unpredictability. Surrounding these areas, parks and wetlands were integrated in order to allow convenient access to more natural settings (Figure 9).

- Convenient access to mass transit subway lines connects Qianhai to the main city of Shenzhen as well as interregional rail lines throughout the Pearl River Delta.

海湾经济特区不需承继珠三角传统文化文脉，而可探索自己独创的新开发理念，这与经济特区自身特点非常相似。问题在于这些新概念是什么？应该考虑哪些具有足够一定影响力的因素，是否打造全新的金融特区？答案在具体前海湾开发项目及其在大珠三角区域中的角色中找到。

在深圳经济特区中，前海的作用是西方世界与中国大陆之间的金融贸易媒介。因此，新区规划在本质上支持并探索这个想法，打造具有鲜明中国特色的国际金融区。具体考虑如下：

— 全部投入为金融行业，但设计为综合性社区，如三角洲地区的传统村落。办公楼在功能上与商业、住宅、酒店塔楼结合，建立一个现代化的、独立的村庄（图7）。

— 交通方便的网格式街道为办公楼提供正式入口。与城市街区交织在一起，以自然通道形式联系区内的文化中心、公共剧场及多层次餐饮露台（图8）。

— 设计现代高效的大楼及符合国际标准的室内环境满足国际商务需求，并结合中国特色，打造具有自然采光通风的公共空间。

— 用于日常活动的空间环境结合使用现代服务和技术系统，最大限度地减少自然中的不可预测性。结合周围景观环

境特点，如公园和湿地，建立与自然的联系（图9）。

— 提供公共交通地铁线路便利连接前海与深圳主城区，并利用城际快速轨道交通连接整个珠江三角洲。

在总体规划中，开发商可以竞标购买地块，往往多个地块合并为大型开发区的子区。每个开发商可用自己的设计师设计建筑、商业环境及景观，在子区中打造统一



Figure 9. China Horoy Qianhai Guanze Mixed-use Tower. Designed by Goettsch Partners. (Source: Goettsch Partners)

图9. 前海鸿荣源冠泽金融中心，由美国GP建筑设计有限公司设计（来源：Goettsch Partners）



Figure 10. China Resources Qianhai Center. Designed by Goettsch Partners. (Source: Goettsch Partners)
图10. 华润前海中心，由美国GP建筑设计有限公司设计（来源：Goettsch Partners）

Upon this master plan, developers were able to bid for the right to purchase parcels of land, often combining multiple parcels into a small sub-district within the larger region. Each developer retained their own designers for the buildings, retail environments, and landscape in order to create uniform sub-districts with a diverse overall aesthetic. The role of ensuring the cohesiveness of the designs met a level of character in line with the intents of the master plan and befitting an international financial center was overseen by the local government (Figure 10).

While Qianhai may be a town without a history, by analyzing the intents of its creation as well as its relationship to the broader context of the Pearl River Delta, a unique and natural identity was able to be crafted specifically for this region. Not unlike the original villages of the neighboring areas, Qianhai's identity is one that embraces its independent reason for existence while simultaneously contributing to the broader network of cities and towns.

Conclusion

The Pearl River Delta is a network of waterways knitting together the land they traverses while concurrently dividing them into individual parcels. When viewed from afar, the delta appears as a monolithic entity that operates as one unit. Only upon closer inspection is it clear that the delta has carved individual pockets of land which work together to create a cohesive whole.

Similarly, the inhabitants of the Pearl River Delta also appear to the world as a singular entity: the world's largest megacity. But, like to the delta in which they live, there are distinct differences in industry, history, and context which define each region and create individually unique identities. Through this network of individual enclaves cohesively quilted together, the Pearl River Delta has shown us a new model for urban development.

的整体外观。当地政府部门监督管理国际金融中心的设计与总体规划协调配合（图10）。

尽管前海可能是没有历史的小镇，通过分析其创建的意图以其与珠三角大背景的关系，设计体现当地独特的地域与自然特征。与相邻区域原始村落不同，前海以其自身独特的存在理由融入更广大的城乡体系中。

结论

珠江三角洲是以水系纵横而同时划分独立地块的网络。远观三角洲为统一的整体，而近观，三角洲是由各单独地块连接组成。

同样，从国际角度，珠江三角洲的居民也是一个统一的整体：国际最大的巨型都市。但是如他们所居住的三角洲，行业、历史、及环境的明显不同使各分区产生自己独特的个性。通过单独体系的相互结合，珠江三角洲已成为新城市发展趋势的模式。

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