The Instant City

Farrells Focus

Rapid urban expansion is not a new phenomenon, Alexander the Great founded Alexandria in 331 BC triggering a small finishing village to grow rapidly over a few decades into what is still the largest city on the Mediterranean coast. Today fast paced urban development is perhaps most closely associated with emerging mega-cities in China, however population growth and the continued migration of people from rural settlements to dense urban centres is a global phenomenon and many similar instances are emerging around the world, not just in China.

Recently the Indonesian parliament has approved a bill to relocate its capital from Jakarta to the planned city of Nusantara on the east coast of Borneo. Egypt is building a number of new cities including a New Cairo City. India has pledged to develop 8 new cities. Saudi Arabia is developing Neom in its sparsely populated desert which borders the red sea coast and Hong Kong has planned to simultaneously build a Northern Metropolis on the border with Shenzhen whilst also creating a new artificial island called the East Lantau Metropolis.

However, perhaps the most extreme example of rapid urbanisation, is that of Shenzhen which sits just north of Hong Kong, in 1980 it was a town with a population of 60,000, today that figure has grown to over 12 million. This development includes the new sub-city of Qianhai to the west of the main CBD located on the banks of the pearl river delta.

This is the setting for one of Farrells recent projects One Excellence, a development on 6 hectares of reclaimed land. It represented an extreme challenge for a practice whose work on architecture and urban design has continually advocated for a contextual approach to the existing urban condition by embracing the heritage and essence of place — in this case there was no existing place to engage with, everything was to be built from

scratch. Unlike established neighbourhoods in other world cities, One Excellence and the wider Qianhai district will not benefit from years of natural urban evolution and agglomeration and is in danger of becoming sterile and lacking character like many other planned cities (think Canberra and Milton Keynes).

Despite these challenges it must first be acknowledged that such a project presents opportunities especially when searching for more sustainable solutions for how we plan our cities. Solutions which in some instances would be impossible to retrofit into an existing urban fabric but in this case can be hard baked into the urban form.

One instance which demonstrates this is the integration of district cooling facilities, two 3 storey buildings integrated into the site that provide cooling for the wider district. By centrally cooling and circulating water they offer and much more energy efficient method for conditioning interior spaces than if each individual building relied on its own equipment.

A second key opportunity is the planned integration of mass transit infrastructure into the district reducing reliance on cars and road traffic. Mass transit is significantly more energy efficient requiring 30 joules of energy per person per meter compared to cars which require 380. This transit-oriented model, with a reduced road infrastructure, not only provides a more energy efficient transport solution but allows for the creation of walkable neighbourhoods, parks can occupy the space that would otherwise be road. The reduced traffic also means less air pollution and improved air quality. Farrells were early pioneers of the transit-oriented model with Charing Cross Station being one of the first instances in the UK of developing the air rights above a transport hub, subsequently the practice has evolved an enhanced understating of this model though projects in Hong Kong

such as the Kowloon station development and numerous MTR station developments which integrate directly into high density urban neighbourhoods.

In the case of one excellence, a walkable district is created with positive connections to the below ground transport infrastructure. Sunken courtyards and skylights that are sculpted into the landscape bring natural light below ground, cultivating a pleasant sub-surface realm allowing pedestrian links to be flanked by high value retail. These acts of design not only add commercial value to the development but help to cultivate active and vibrant multi-level streetscapes.

This highlights the key challenge facing todays urban districts, to continue to exist successfully they must be both economically and socially sustainable. Farrells are pursuing a form of city making (or placemaking) that is not just supportive of lives and patterns of occupation but seeks to actively enhance them though vibrant neighbourhoods that can cultivate resilient and meaningful communities. This is not an easy task...

"Urban environments are complex, as designers our role is to find ways of interpreting and understanding them such that we can engage in meaningful acts of design".

The study of legibility in urban form was pioneered by planner Kevin Lynch, who proposed a toolbox of urban design elements that help contribute to a strong sense of place, namely: nodes, paths, edges, districts, and landmarks. This provides a useful basis for approaching design but what must also be appreciated in the creation of place is the complex interdependent relationships that exist between built form and the social-cultural-economic systems it is part







of. Interventions are networked and trigger expected and unexpected chain reactions as discussed by Sir Terry Farrell in the book "The City as a Tangled Bank"

The phrase Placemaking that is today frequently used, finds its origins in the ideas of writers such as Jane Jacobs and has been used extensively by Terry throughout his career. For Farrells in Qinhai this translates to a holistic balance between a series of "big moves", and sensitive urban thinking.

Firstly it was essential for the district to be mixed use, residential and commercial uses ensure this neighbourhood is lively throughtout the day by embracing the 24h city concept and avoiding the fallacy of purely commercial districts which become deserted on evenings and weekends. Careful consideration is made into the integration of retail, dining and entertainment facilities which cluster around the public spaces, crafted into rhythmic frontages of small shops, enlivening the streets and ensuring an engaging pedestrian environment. Complimenting this is a fine grained and permeable pedestrian realm enabling choice, taking ques from stand out projects such as Beijing Taikoo Li Sanlitun which have achieved commercial success due largely to their composition of smaller human scale buildings and streetscapes. In place of roads, generously-sized pathways, promenades and elevated walkways provide ample space to stroll, dwell, and jog with pocket gardens, sunken courtyards and cafes opening onto plazas, encouraging the serendipitous street life that is the marker of a successful urban district.

Terry has often used the phrase "Landscape should be the primary infrastructure" and this is a concept that is embodied in the larger city scale masterplan of the Qianhai area by Field Operations. Green landscape fingers push inland from the waterfront separating the 5 core city districts, however whilst these offer welcomed green views, parkland and amenity space, they are often detached from the development areas, separated by large roads and waterways. Farrells therefore made a strong effort to continue the greening into the site allowing it to proliferate into the







pedestrian realm that will be used on a daily basis connecting the development to both the transport infrastructures and wider green network. This multi-scale green network plays an ecological role in mitigating the urban heat island effect and purifying the water and air. It also provides shading in the form of trees and protection from the elements without the need for excessive canopies. Sponge city measures including swales are adopted to allow the landscape to capture and absorb the large volumes of water delivered in the summer months by rainstorms and typhoons.

On an urban scale the one excellence development employs a careful composition of nodes and Landmarks that aid in the role of wayfinding and navigation. The identity of a place is often defined by one or two key landmarks. The "big moves" therefore play a crucial role in defining a sense of place, they take on symbolism and provide a framework for us to stabilise our understanding of a place. In this case the gateway towers became an icon both in signifying the arrival into the Qianhai district but by also by being the first towers to top-out they became emblematic of the inception of the new district.

Within the site a network of urban markers and variety in architectural form help to add to the sense of discovery as you move through the neighbourhood. This is complimented by a layering of varied facades types, from

the green walls of the cooling towers, the staggering mullions of the office towers, to the novel cloud like expression of the residential clubhouse. At the human scale the character is further enhanced in the architectural expression, with the waterfront setting informing the fluid undulating ribbons of the podium facades which act to fuse the urban fabric with landscape features to create more human centric urban experiences.

In summary the project represents an extreme challenge in urban design, a challenge that is becoming increasingly common around the world. Farrells employed their 50 years' of experience to help cultivate the growth of a multifaceted new urban quarter with all the energy, diversity, and people-oriented street life of established successful districts around the world. It is a real world project that addresses sustainability within the scope of its design framework. Despite the project achieving the highest China Green Building certification (level 3), it is acknowledged that there is significant scope for continued advancement in sustainable city making that extends well beyond the domain of design and this project. However, it is belived that this project can act as a leading precedent in many areas and form a stepping stone towards a future where we can achieve a more sustainable urbanism that strives to better compliment our evolving lives and patterns of occupation.

