

HOW TO CREATE SUSTAINABLE COMMUNITIES IN HONG KONG? INHERENT PROBLEMS OF RECENT URBAN LAYOUTS FOR MICROECONOMIC OPPORTUNITIES AND QUALITY OF LIVING

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ABSTRACT

As the Hong Kong SAR Government embarks on new large-scale development projects in the North-East New Territories and Hung Shui Kiu, the following paper explores the qualities and inherent obstacles in Hong Kong's urban design and planning approach. The paper is based on the authors' research on districts in Hong Kong, namely Sai Ying Pun and Tin Shui Wai. It proposes to learn from the merits of Hong Kong's early districts: their integrated street networks, small blocks, mixed-use typology and active street frontages enhancing connectivity and generating a multitude of social and economic activities. These advantages contrast with the conditions of Hong Kong's recent new towns, which stifle individual initiatives, restrict microeconomic opportunities, and limit the life experiences of their residents, usually the poorest part of the city's population. As the paper argues, the understanding of the relationship between urban form and microeconomic opportunities is essential in creating a better quality of living and nurturing sustainable communities in Hong Kong.

Keywords: *New town design, microeconomic opportunities, quality of living.*

INTRODUCTION

In his 2013 policy address, Hong Kong SAR's Chief Executive Leung Chun-ying promised to increase the supply of subsidized housing. As a long-term land development strategy he confirmed plans for the New Development Areas in North-East New Territories and the Hung Shui Kiu district adjacent to Tin Shui Wai. Both plans were already mentioned in the *Hong Kong 2030 Study: Planning Vision and Strategy* (2007). This paper makes use of these plans to reflect upon the merits and challenges of Hong Kong's urban design and planning approaches, highlighting aspects that have not been explored enough and presenting inherent obstacles for the building of sustainable communities.

Over the past years, there have been various initiatives to link questions of urban form, socio-economic issues and climate change in considering the interrelationship between different scales from individual buildings, to neighbourhoods and to metropolitan regions. Patrick M. Condon presents a notable holistic approach in his recent book: *Seven Rules for Sustainable Communities: Design Strategies for the Post-Carbon World* (Condon, 2010). He proposes the following points should be considered in urban design and planning:

- 1) *Restore the street car city;*
- 2) *Design interconnected street systems;*
- 3) *Locate commercial services, frequent transits, and schools within a five-minute walk;*
- 4) *Locate good jobs close to affordable homes;*
- 5) *Provide a diversity of housing types;*
- 6) *Create a linked system of natural parks; and*
- 7) *Invest in lighter, greener, cheaper, and smarter infrastructure.*

These points offer a clear idea on how environmental, economic and social factors are related to fundamental decisions in urban design and have been adopted as a basis for the present paper. Although Condon's seven rules are to be understood as interrelated

and all of them should deserve our attention, this paper focuses on points 2), 3) and 5) in particular, for they are the least considered aspects in the context of Hong Kong.

Hong Kong, due to its high density, efficient public transport system and protected country parks, has favourable conditions to become a carbon efficient and sustainable city. However, its most recently developed new towns have failed in their social integration, economic opportunities and quality of living. And the city is observing its dropping quality of living rankings in comparison to other cities in the region, particularly Singapore¹. While such quality of living rankings could play a positive role in pushing governments and professionals to reflect on the effectiveness of their current development projects and therefore contribute to improving the living conditions of citizens, based on their particular focuses they might not capture factors of key concern for local communities, especially those living in low-income areas.

Hong Kong is often portrayed as a place where everything seems to be measured in monetary terms. The *Wall Street Journal* and Heritage Foundation have ranked Hong Kong for the 17th time as the world's "freest economy"²; and the World Bank and the International Finance Corporation celebrated the city as the second best place for "doing business"³. Thus it might come as a surprise to some that this paper investigates the lack of (micro)economic opportunities in parts of Hong Kong and its deep, adverse effects on the quality of living of a substantial number of residents living in these low-income areas.

Tin Shui Wai and Tung Chung, Hong Kong's most recently developed new towns, are areas with particularly high concentration of low-income residents. The first new town projects in Tin Shui Wai date back to 1982, but social problems seem to be found mainly in projects completed since 2000. The Tin Shui Wai new town stretches over an area of 4.3 km² and has a considerable population size of 292,000 residents (Civil Engineering and Development Department, 2012). Thus it has 100,000 more residents than for instance the flourishing Swiss city Basel⁴; and together with its two adjacent areas of Yuen Long new town (211,000 residents) and the new development of Hung Shui Kiu envisioned to accommodate 160,000 people, we are talking about an urban area with more residents than the city of Vancouver. While scrutinizing the differences between these new towns and Hong Kong's earlier districts, such as Sai Ying Pun, the paper also challenges popular planning ideas such as "transport oriented developments" and "urban nodes" if they are considered as formulae to guarantee the development of "green and sustainable cities".

Even in much celebrated cities like Vancouver, studies are emerging that the design of urban nodes around costly mass-transit infrastructure like the Skytrain could have limitations in activating larger urban areas, and performing less successfully than earlier developed areas based on integrated street networks and street cars, despite

¹ Most of the 'Quality of Life' indices are produced by international management and employee placement agencies and are concerned with conditions for expatriate employees and managers and have no interest in the quality of life for those who live in the placement locations. For data that specifically measures the quality of life in Hong Kong, see: The Centre for Quality of Life, Chinese University of Hong Kong: <http://www.cuhk.edu.hk/ssc/qol/eng/index.html>

² See: www.heritage.org/index/

³ See: www.doingbusiness.org/data/exploreeconomies/hong-kong,-china/

⁴ The Basel comparison is perhaps apposite in that Hong Kong has sometimes been called 'the Switzerland of Asia' (Lo, 2005) on the one hand, and on the other, Basel – in the form of the Basel Art Fair – has recently moved its brand to Hong Kong, taking over control of the Hong Kong International Art Fair.

their lower travel speed. These studies consider trip duration, walkability, closeness to businesses and schools, cost of infrastructure investments, energy consumption and carbon emission, flexibility in land uses and social benefits through the synergetic effects of a highly interlinked network (Condon, 2010). Following these studies, it is not surprising to find that many cities that usually top the quality of living and sustainability rankings, including Portland, San Francisco, Vancouver, and Zurich, depend to a large extent on integrated street networks serviced by street cars.

In fact, Hong Kong's older districts, which were developed in the same period as those western cities in the late 19th century, share very similar grid layouts, small urban blocks and public transport systems (of trams, buses and later an underground mass transit system). However, like many North American cities, following the introduction of private automobile, modern planning ideas and standard vehicular road design, the earlier street grid patterns have disappeared almost entirely from the urban planning repertoire. In Hong Kong, with the exception of two entries for the West Kowloon Cultural District master layout by Foster & Partners and by Rem Koolhaas⁵, it is revealing that the idea of grid patterns returns at a moment when government agencies and urban planners seek to boost "creative districts". However, the highly connected grid pattern is absent in the layout of new towns in Hong Kong, which are planned purely for housing.

This paper takes as its general approach Edward Soja's observation of a "spatial turn" (Soja, 1996), which allows us to understand that not only do economic and social conditions shape urban environments, but also the other way round, that spatial configurations can deeply affect economic and social conditions of a place.

To investigate the differences between Hong Kong's older areas (designed based on integrated street grids and mixed typologies) and recent new towns, we have selected the districts of Sai Ying Pun and Tin Shui Wai for comparison.

The comparison is enlightening in various ways. Tin Shui Wai has been a widely discussed new town because of its social problems, it is therefore important to understand the potential impact of planning decisions on its social environment, pitting against the merits of Hong Kong's older districts like Sai Ying Pun, one of the city's first urban expansions in the 1850-60s. While the living environment in Sai Ying Pun can't be considered as perfect especially in regards to its air quality (Ng, 2010), its spatial configuration allowed its mostly low-income residents a range of life choices, and opportunities for social integration and mobility. The following section will present how these merits were not adopted in the layout of Tin Shui Wai and those choices and opportunities are thus largely missing in the area (Chui, 2008). In addition, these qualities in Sai Ying Pun and other older districts of Hong Kong are disappearing due to development pressures brought about by recent urban renewal and infrastructure developments.

⁵ See: www.wkcda.hk/pe2/en/conceptual/index.html



Figure 1: Study Areas: Tin Shui Wai New Town (Area A south & B north) & Sai Ying Pun District

ALLOCATION OF COMMERCIAL SPACES – LIMITATION OF THE TOD⁶+NODE MODEL

Similar to North American suburbs, Hong Kong's new towns are developed according to a zoning system. Commercial as well as leisure facilities are interpreted as “destinations” or “nodes” (in Hong Kong, these are mostly shopping centres and markets). In each super block of Tin Shui Wai, there is always a commercial centre. Following the TOD standard, each of those centres can be reached within a 400m-walk from the surrounding housing blocks and the light rail stops. This idea is generally positive, as it guarantees the supply of daily goods in walking distance from home. Similar ideas were also applied in Hong Kong's private housing developments, including the LOHAS Park, a so-called “green town” recently developed by the MTR Corporation, on a single podium covering a 33ha site. In Tin Shui Wai, the 400m passages between each node are initially envisioned as pedestrian corridors along continuous green spaces. However, they are often executed with hard and sealed surfaces for fire engine and ambulance access, or simply to save money from the higher maintenance cost for green spaces. These projects follow planning standards – with little or no emphasis on urban design and place making – and mainly aim to ensure fast vehicular traffic, safe pedestrian circulation, an increased amount of open space for better air ventilation, at the same time maximizing housing density. However, if all these goals are followed without taking into consideration an integrated street network, the quality of street spaces, active street frontages and a mixed-use typologies, the bustling social activities in older parts of Hong Kong become impossible to realize in the city's recent new towns.

⁶ Transit-oriented development



Figure 2: Tin Shui Wai Main Arterial (Tin Shui Road), 2013

Instead of letting the main street become the backbone of commercial and social life, buildings in Tin Shui Wai turn their back to the street. Integrated street networks with narrow streets and small blocks facilitate and multiply choices and experiences of pedestrian movement, while large super blocks, as they are realized here in the district, are connected to a system of wide distributor roads that substantially discourage walking. In Tin Shui Wai, pedestrians walk 400 meters along largely enclosed buildings on the main street, realize then that they can't cross to the opposite side of the distributor road, as pedestrian crossings are rare, and are forced to take long detours over footbridges. After taking such a walk along such an inconvenient and inactive main arterial once, there is no motivation to come back again. Similar uninviting street spaces can easily be found in other areas recently built in Hong Kong (including those with luxury residential complexes). Affluent people might prefer these areas as they are located outside the busy and crowded city centre and offer more living space, amenities and better air quality. For them the lack of street activities is less a problem, as they can send their domestic helpers to do the daily shopping or call delivery services, and can take taxis or private cars to reach more attractive environments as they want (thus however increasing the city's carbon footprint). Also they are more likely working in sectors that do not depend on microeconomic opportunities. However, low-income residents are left with no other alternatives than to stay and accept their surroundings. Many of Tin Shui Wai's residents earn – if employed – not more than Hong Kong's minimum wage of 30HKD/hour; thus an MTR ticket to areas with more job opportunities takes a substantial part of their low salaries.

As Tin Shui Wai lacks major employment centres and places for social interaction, we need to ask why the most appropriate locations for businesses and social activities, where people usually would walk and interact remain deserted. This becomes especially evident at the street corners of Tin Shui Wai's main arterial. In a town of such high density, corner locations on main streets would be where businesses thrive.

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Figure 4: Tin Shui Wai Main Arterial (Tin Shui Road), 2013

However, due to the master plan design, we find large car-park buildings of enclosed shopping centres at these locations while pedestrians are re-routed away from corners to footbridges. In our observation in Sai Ying Pun, street corners are popular places where people would gather and talk; similar observations were made by William H. Whyte in New York and Tokyo (Whyte, 1980, 2000). However, even Sai Ying Pun's Centre Street has lost much of its previous social activities and is constrained by railings for road safety, limiting freedom of pedestrian movement and encouraging drivers even to speed up.

Condon described the social life that tends to develop around arterial structures in integrated street network serviced by street cars (similar to the light rail system in Tin Shui Wai):

“Once at the arterial, [pedestrians] turn either ninety degrees right or ninety degrees left to take advantage of services on the two or three blocks in either direction. Thus, their sense of the place is determined by their walk to the arterial and their eventual familiarity with the blocks immediately in either direction. [...] Vibrant streetcar streets are experientially very rich, with buses or streetcars arriving and departing every few minutes, familiar shopkeepers sweeping sidewalks, denizens of ethnic social clubs arguing on sidewalks, school kids walking to the local library branch, and teens showing off. They offer a unique dialectic between the freedom of action allowed by the apparently infinite length of the corridor and the proxemic familiarity that characterizes the best of village environments.” (Condon 2010, 70)

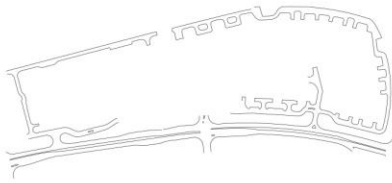
Little of this happens along Tin Shui Wai's arterial for its lack of consistent planning and programming. Alternatives are possible, as the case of the nearby Yuen Long district shows. The current layout of Yuen Long emerged from an earlier market place and therefore still followed a smaller integrated grid. Its main arterial is narrower than the one of Tin Shui Wai, and in contrast is lined by mixed-use buildings with street-level shops. The light rail services both towns, yet its tracks also separate their main streets. A modern street car system like Portland's TriMet might be able to solve this problem. Nevertheless, Yuen Long's Castle Peak Road, in contrast to Tin Shui Wai's inconvenient Tin Shui Road, is full of life, reaching almost the same intensity as that of Nathan Road, Kowloon's famous main arterial.

Tin Shui Wai's arterial and other recent main arterials in Hong Kong are surprisingly wide. Cities in the USA, with much higher vehicle ownership (overall 797 cars per 1000 people in 2010, according to data.worldbank.org), are diminishing space for vehicular traffic on their downtown streets, and allocate the gained space to pedestrians and bikers, for instance at the recently redesigned Broadway in New York. In contrast, Hong Kong, with one of the lowest vehicular ownership rates in the developed world (77 cars per 1000 people in 2010, according to data.worldbank.org), built much wider roads in new towns like Tin Shui Wai. This happened despite the fact that Tin Shui Wai has a light rail, bus and MTR services and most of its population is too poor to afford private cars. The large road size is linked to the system of super blocks, in which traffic accumulates on distributor roads, rather than being diffused into an integrated street network with smaller and better walkable streets.

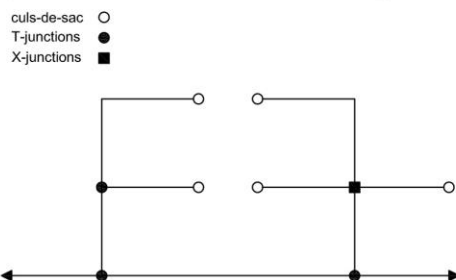
In terms of safety, building large distributor roads might not be the best solution. Peter Swift's research in North-America registered that the number of pedestrians killed in accidents on wide suburban residential roads was four times higher than that on narrower traditional urban streets, as wide roads invite drivers to drive faster and leave them less time to react to unexpected crossing pedestrians. Moreover, accidents with pedestrians at a driving speed of 35mph are much more likely to be fatal (Swift, 1998, Condon, 2010). In Tin Shui Wai, the danger caused by fast vehicular traffic is addressed by re-routing the pedestrian flow away from the road to footbridges, thus significantly reducing the connectivity of the pedestrian network and the walking experience. These detours are especially inconvenient and uncomfortable for the infirm, the elderly and for mothers with children.

Similar problems are also occurring in Sai Ying Pun now. Along its narrow residential streets, mini buses and trucks are allowed to drive at 30mph. As this creates fatal accident risks for pedestrians walking along the extremely narrow sidewalks, railings are put up at most street corners to improve road safety, destroying the otherwise excellent pedestrian connectivity and encouraging even higher vehicular speed. Other cities like New York, Portland, and Vancouver employ the exact opposite strategy of drastically reducing vehicular speed and removing railing obstacles to enhance road safety and pedestrian movement at the same time.

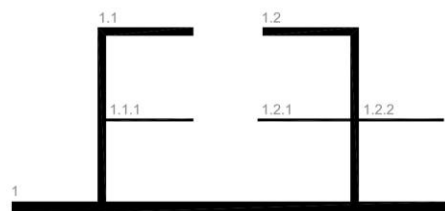
ROAD PATTERN OF TIN SHUI WAI AREA B



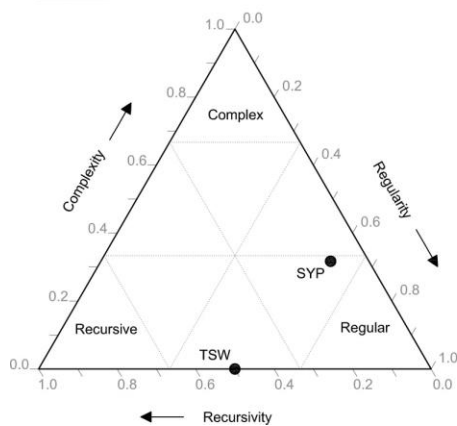
CONFIGURATION OF TIN SHUI WAI AREA B NETWORK



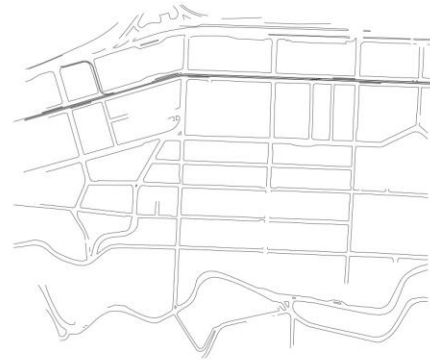
ROUTE STRUCTURE OF TIN SHUI WAI AREA B NETWORK (TSW)



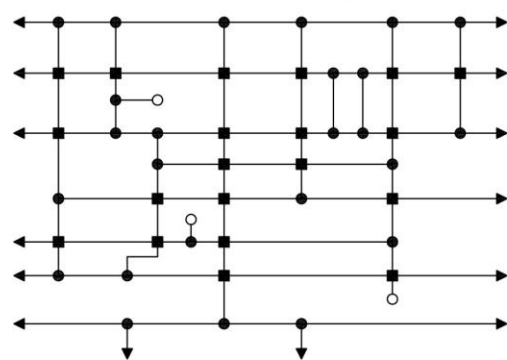
HETGRAM



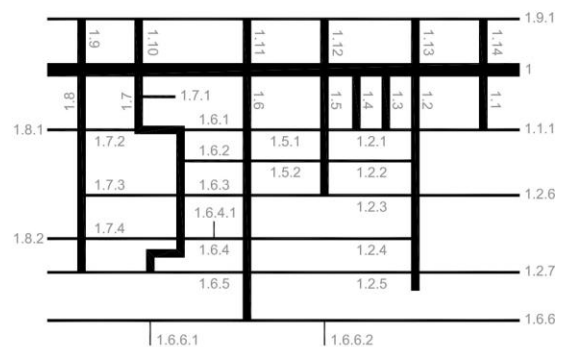
ROAD PATTERN OF SAI YING PUN



CONFIGURATION OF SAI YING PUN NETWORK



ROUTE STRUCTURE OF SAI YING PUN NETWORK (SYP)



CHARACTERISTIC STRUCTURE DIAGRAM

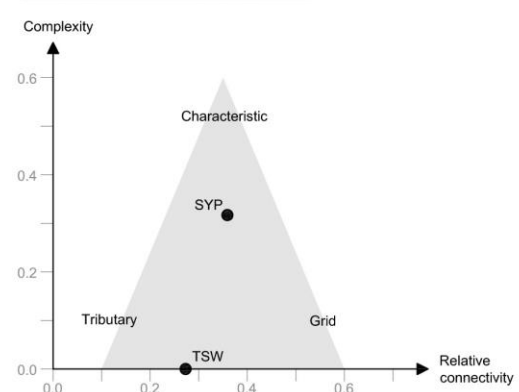


Figure 5: Comparison of Tin Shui Wai (left) & Sai Ying Pun (right) according to: Road Patterns, Configurations, Route Structures, Complexity & Connectivity



Figure 6: Activities at Street Corner, Sai Yin Pun, 2012

MICRO-ECONOMIC OPPORTUNITIES IN SAI YING PUN AND TIN SHUI WAI

After discussing the design of main arterials, it is time for a deeper study of the particular conditions facilitated by the integrated street network, mixed typologies and active street frontages in Sai Ying Pun, and a comparison to Tin Shui Wai.

Sai Ying Pun was one of the first expansions of the City of Victoria a decade after the establishment of the British colony of Hong Kong (Tieben, Woo, Yuet, 2009). The rectangular grid layout was an attempt to provide healthier living conditions comparing with the earlier developed Tai Ping Shan area. The northern part of the district was quickly built up due to its vicinity to the go-downs at the harbour and the high demand for accommodations due to the growing number of refugees from the Taiping rebellion (1850-1864).

In 2012, we conducted a survey of all ground-level businesses and workshops in Sai Ying Pun, which allowed us to study the changes of the district after the opening of the new MTR West Island Line in 2014, and the almost completed hillside escalator on Centre Street. We organized the district layout in 25 blocks adjusted in shape to the irregular and steep terrain. The largest block, located between Queen's Road West and Des Voeux Road West, measures 141x96m. This is already relatively small in comparison to block sizes in other cities (pedestrian friendly cities Vancouver and Seattle have blocks of 200x100m on average, while Barcelona's example blocks are 113x113m).

In addition, Sai Ying Pun's blocks are further subdivided by a system of alleys, lanes and terraces, creating high permeability and many choices for pedestrians to explore the district. The spatial quality of this system suffered over the years, due to a general



Figure 7: Ground Level Activities at Residential Tower, Tin Shui Wai North, 2012

neglect and building interventions that did not regard these streets, alleys and lanes as public spaces in this high-density district.

Each block, depending on its size, has a different number of stores along its perimeters. Smaller blocks of 141x35m (for example between Queen's Road West and First Street) have around 50-60 public/private interfaces that are usable for stores (Tieben, 2013). All 25 blocks together provide spaces for 1,240 shops and workshops, on the street level alone. If we assume that 2-3 people work in each shop, the district already generates 2,480-3,720 jobs. In addition, there are 121 stalls in the two indoor markets in the district⁷; and there are many more agencies, associations, tutoring classes, medical and massage services on the upper storeys of buildings. The exact number of commercial activities is difficult to trace, as some of them operate in grey zones inside residential units. For business owners, this requires lower investments and therefore allows careful in setting up small businesses. Towards the two main arterials on Queen's Road West and Des Voeux Road West, there are also office towers with larger firms providing more substantial numbers of employment. At the same time, Sai Ying Pun has retained its role as a residential district with a population of 35,960, 50% of whom work in the same district according to hk.centamap.com.

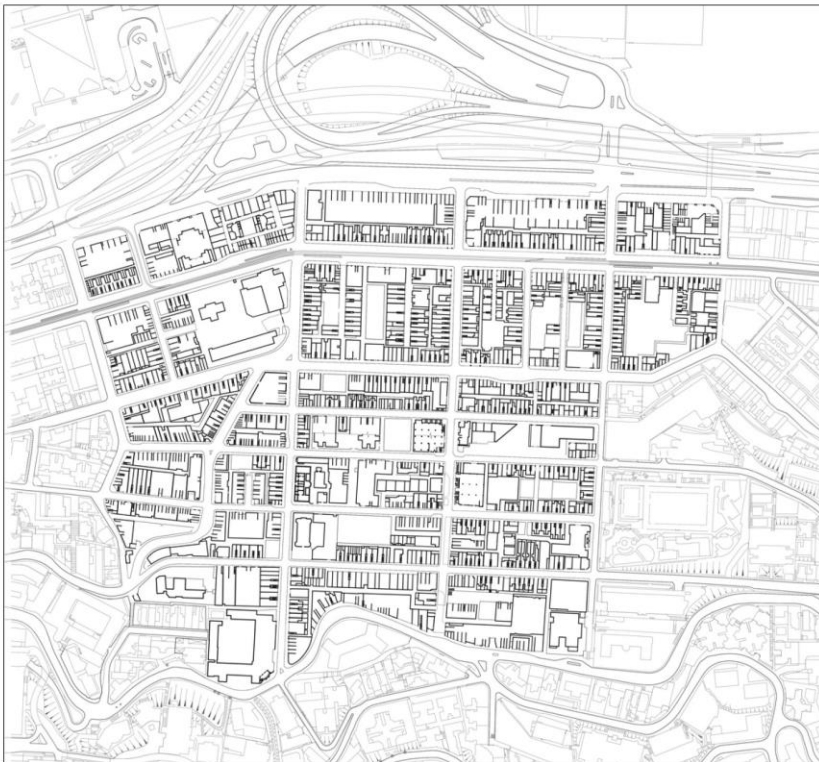
In addition to proper schools, the district also offers many supporting educational, social and community facilities (many of them located on the upper floors of buildings), catering especially for children and elderly people. With its close spatial integration, flexible typology, and large number of shops and workshops, the district attracted and accommodated waves of migrants from Mainland China - many of them with limited

⁷ See www.fehd.gov.hk/english/map/market/CW.php

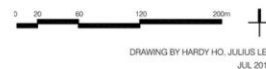
means - and helped in integrating them into the Hong Kong society. Most jobs in Sai Ying Pun were not created based on a predefined plan of the government, by foreign



TIN SHUI WAI NORTH (AREA B) GROUND LEVEL INTERFACES



SAI YING PUN DISTRICT STREET INTERFACES



DRAWING BY HARDY HO, JULIUS LEE
JUL 2013

Figure 8: Comparison Ground Level Interfaces:
Above: Tin Shui Wai North (Area B) / Below: Sai Ying Pun (same scale)

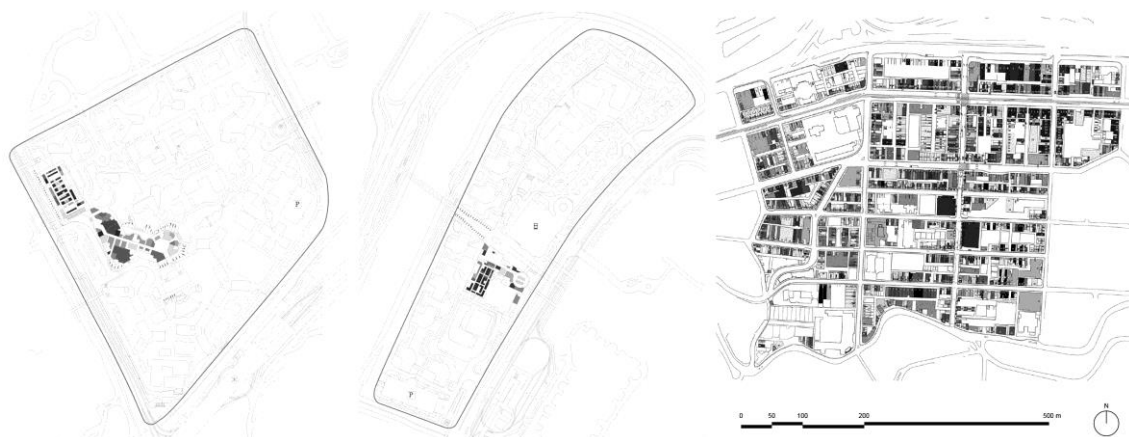


Figure 9: Survey of Small Businesses and Workshops at Ground Level
Tin Shui Wai North (Area A & B) and Sai Ying Pun (same scale)

direct investments, or by global and local corporations. Instead the small businesses grew based on the initiatives, creativity and persistence of people with little means.

When the district was first surveyed and laid out, its transformation into its current form, with high-risers of 29-56 storeys and businesses selling products and providing services, could not have been imagined. These fundamental transformations were made possible by a simple but smart initial layout, offering maximal changeability of different social components while ensuring multiple interconnections among them to achieve a sense of community.

In Tin Shui Wai, we selected for the study two areas with similar sizes of population to Sai Ying Pun (35,960 people): Area A, in the south of the district adjacent to the MTR, with 33,539 residents; and Area B, in the north of the district with 35,855 residents.⁸ Average monthly income per person in Sai Ying Pun is 12,042 HKD while it is 8,328 HKD in Tin Shui Wai's Area A and 7772 HKD in Tin Shui Wai's Area B. The approximate proportion of Tin Shui Wai's residents who were born in Mainland China is 38% (Population By-Census, 2006).

Both areas in Tin Shui Wai are organized as super blocks and surrounded by large distributor roads. Each super block contains one commercial centre with an integrated market. There are 142 businesses, private agencies and service providers in Area A's Tin Yiu Plaza, including stores on upper levels (18) and market stalls (75). The Tin Chak Shopping Centre of Area B has 189 businesses, including shops on upper levels (77) and market stalls (88). The numbers are similar in that they are fixed by design, which makes adaptability to changes almost impossible whether on the building or the urban scale. In residential towers in Tin Shui Wai, unlike the case in Sai Ying Pun, commercial activities are also not permitted (should such activities take place, residents would risk losing their subsidized home).

⁸ These population figures are taken from hk.centamap.com

As almost none of the businesses have access to street spaces, and they instead have to follow the strict management rules of shopping malls, it is impossible to open workshops (for example carpenters, car mechanics, bicycle repair and larger printing shops) in both areas (with a joint population of 69,394 people). William H. Whyte highlighted the essential role of food outlets in activating public spaces and facilitating social interaction; but in both areas, there are no places for Hong Kong's popular and affordable Dai Pai Dongs (大牌檔 - outdoor eateries) to operate, preventing low-income residents from enjoying "al-fresco dining". All these design and management decisions strongly restrict what people can do, buy, and enjoy in this new town, and unnecessarily reduce job opportunities for the residents there.

So while the amount of "green" open space is increased in Tin Shui Wai, life choices are problematically limited, especially when it is compared with the lively and crowded older districts. Tin Shui Wai's situation is particularly severe as chances are slim that investors from outside will invest in the district, while traveling to other areas with better job opportunities is costly and long.

Would this situation be different if the district was built with an integrated street network, active arterials and flexible mixed-use typologies? The problem of poverty might not be easy to resolve; however, the sentiments of isolation, monotony and helplessness could more likely be changed. We can test this by looking at further examples: Sham Shui Po, while being another Hong Kong low-income district, is filled with bustling life, not substantially different from the busiest streets in Mong Kok, except that prices of goods are lower. In Sham Shui Po, Yau Ma Tei and Mong Kok, rows of street-level shops are combined with additional layers of hawkers, further increasing the activity level and micro-economic opportunities. Hawkers also existed in Sai Ying Pun until they were relocated to the indoor markets in the 1980s (Leeming, 1977).

Sham Shui Po has made negative headlines due to its partitioned flats with people living in miserable conditions (Ng, 2012; Gayle, 2012; Cassey, 2013). While the greed of landlords is appalling, the fact that many people still choose to live there despite the inferior conditions might also indicate that in Sham Shui Po, it is easier for the urban poor to find a foothold, escape social isolation, and have choices and opportunities to survive. We have no information if there are people preferring Sham Shui Po's cage houses or "coffin-homes" in partitioned flats, to the relatively well-designed and significantly larger apartments in Tin Shui Wai. This might well be rare. However, based on our study of the different layouts and urban experiences among the districts, it is arguable, that the monotonous street spaces and the lack of opportunities in Tin Shui Wai are not only caused by the background and poverty of its residents (comparing with Sham Shui Po) and the distance to employment centres (comparing with Yuen Long) but are also deeply linked to its particular urban layout, building typology, and limited public/private space interfaces.

ISOLATION AND HELPLESSNESS VS. CONNECTEDNESS AND EMPOWERMENT

The common feeling expressed in the life stories collected by Eva Chan Sik-chi in her book *Voices of Tinshuiwai Women* (Chan, 2009) was a sense of helplessness and a lack of opportunities to shape destinies. Most of the women interviewees mentioned their uncomfortable feelings of being forced to accept social benefits instead of being able to work.

The comparison between Sai Ying Pun and Tin Shui Wai shows, that chances for Tin Shui Wai's residents to shape their destiny through their own initiatives are, in fact, substantially lower: the 1,361 places on ground level and in the markets in Sai Ying Pun versus Tin Shui Wai's 121 and 64 places in its Area A and Area B respectively. In addition, Sai Ying Pun offers various spaces on the upper floors of its older buildings, which are flexible enough to set up small businesses or agencies; nothing similar exists in Tin Shui Wai. These differences also have direct expression in street spaces: in Sai Ying Pun, we see on every step along the streets a multitude of commercial signs representing personal initiatives and investments into one's own business as well as the community, all this is missing in Tin Shui Wai's outdoor environment. As Sai Ying Pun's streets are full of shop signs that encourage its residents to become small entrepreneurs, there is almost no trace of evidence in Tin Shui Wai that personal business initiatives could ever work (an exception being the colourful displays of the kindergartens on the ground level of residential towers).

As a response to the experience of helplessness, Professor Ernest Chui proposed to learn from these lessons of Hong Kong's new towns:

“With the concern for combating the widespread poverty in mind, a ‘community economy’ can be developed in the new towns like Tin Shui Wai North, in which small businesses operate within the framework of ‘social enterprises.’ Such social enterprises can help to create jobs, training, and the provision of services for people within a specific community. They are characterized by ethical values that carry a commitment to building people's skills in local communities. The profits generated from these small businesses are principally reinvested to achieve their social objectives [...]” (Chui 2008, 67-68)

While this proposal is a positive step ahead, our argument is that the layout and design of Tin Shui Wai's urban environment will hinder it, if planners fail to understand the impact of spatial design itself on determining what people can do in shaping their own destinies.

With no alternatives left, residents in Tin Shui Wai North initiated their own informal hawker market along the river (a “drainage channel” according to the official planning language). Thus they followed the same strategy adopted by many other places to escape poverty and social isolation; the strategy is also practiced in Hong Kong's older districts for more than 170 years.

The problem of the hawker market in Tin Shui Wai was not the shortage of vendors, customers, and goods, but, on the contrary, there were too many of them. In interviews, female hawkers regarded the opportunity to socialize as the second to the most important motivation for them to sell at the market. With an understanding of Tin Shui Wai North's urban form and its natural topography, they arranged their stalls along the most convenient circulation route next to the water, creating a synergy between the most attractive location and the directions where people tended to walk across. Thus the market quickly developed into the main community space of the district, and survived regular police attempts to stop the “illegal” commercial activity.

After a tragic accident of an old hawker who drowned himself when trying to escape the police, the market was relocated in 2013 to a place near the Tin Sau light rail station. Newly designed hawker stalls were installed and the market has since been organized by the Tung Wah Hospital Group, Hong Kong's longest established NGO. While the market's legalization is commendable, the relocation, again, failed to create synergies. While the original market initiated by the residents was successful as it was linked to the daily movement patterns of the residents and the most beautiful scenery, it easily

attracted people to come and stay. In the new location selected by the government, the market struggles to survive as it hardly connects to the residents' daily routes. Thus it requires a specific reason for residents to go there, instead of just passing by. And the market loses a quality that introduces liveliness into a monotonous and restricted district, as a sign of a collective community action, spatial ownership and empowerment.⁹ If we would start to understand a new town like Tin Shui Wai, with a population of 292,000 people, not just as an assemblage of "housing estates" and "new development areas" but as a real city, it would be designed very differently: It would include a vibrant main street as the core collective community space and residents being treated as citizens, who would have a major say regarding, for instance, where the right place of their market should be.

CONCLUSIONS

With a lack of understanding and short-sighted profit seeking, public street spaces in Hong Kong's older districts (e.g. Sai Ying Pun) continue to degrade. New constructions eliminate their public-private interfaces and restrict opportunities for their micro economies. Road design focusing on high vehicular speed and pedestrian safety restricts movements, limits opportunities and choices. Thus the strengths of interconnected street network, proximity and interconnection are lost. Every day we experience the growing digital "social networks" which build on multiple links, immediacy and synergies. Similar qualities exist in Hong Kong's early developed districts with small blocks, narrow streets, a multitude of interfaces and mixed-used typologies.

Jane Jacobs has defended these qualities already (Jacobs, 1992), while Christopher Alexander reminded us that "a city is not a tree" (Alexander, 1966), attacking the planning of street hierarchies similar to those we find in Tin Shui Wai today. Hong Kong's new town design limits commercial life and social activities to MTR station nodes and shopping malls. While they offer well-managed, air-conditioned and efficient environments, they are connected currently to a planning system of super blocks, car dominated distributor roads, and foot bridges. The resulting city is fragmented by functions and social groups. The price is particularly high for low-income communities, which suffer even more from isolation and lack of opportunities.

Economist Edward Glaeser reminded us that people moved from the countryside to cities for opportunities and choices (Glaeser, 2011). Cities flourished as they brought together different people to live in close proximity, offering connectivity and exchange. Hong Kong's early districts with integrated street networks and flexible typologies are living examples of how urban proximity, connectivity and diversity help generate multiple synergies. But while these qualities are gradually fading in those older districts, they are no longer celebrated in Hong Kong's recent new towns such as Tin Shui Wai and LOHAS Park. As Hong Kong embarks on designing its next generation of new towns, the inherent opportunities for synergies should be reconsidered, in the combination of integrated street networks, streetcars, and mixed-used typologies. In

⁹ A similar but legal market exists along Berlin Kreuzberg's Maybach Ufer and has become one of the biggest attractions of the district, where the local Turkish community mingles with university students and general visitors. The market gives the diverse district a sense of collective identity and pride, and successfully activates the surrounding streets. It also provides residents with locally produced food and is thus a successful example for a "green" and social city.

this context, Hong Kong's older districts merit fuller research and understanding of their urban qualities to inform the design of new developments and to avoid the apparent failure of recent ones as noted in this paper.



Figure 10: Sai Ying Pun Street Space After Recent Transformation
Left Street Side: The New Urban Renewal Project Island Crest, Photo 2013

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