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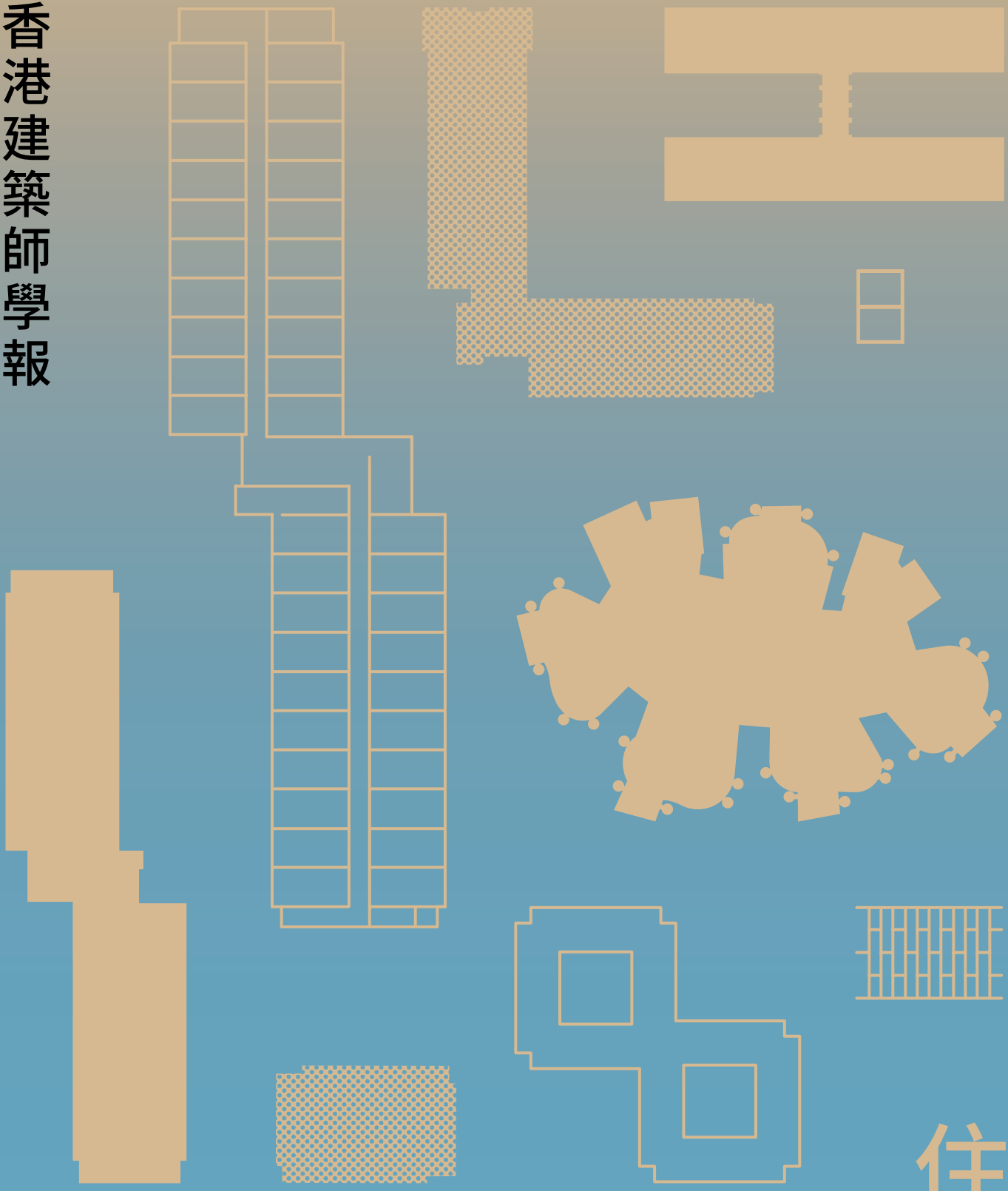

Occupy Housing 住宅

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Dear HKIA

For the past 60 years, HKIA, whilst experiencing ups and downs together with Hong Kong, has been growing steadily as the city continuously developed. Thanks to my predecessors, our Past Presidents had unfailingly led the Institute with missions in upholding professional integrity and promoting architectural excellence.

During the term of my presidency 2015 — 2016, the Council has put substantial weight to motivate and mobilize members, especially the younger generation to explore abundant exciting opportunities in Hong Kong and beyond, which in turn help to sharpen our competitive edge. These initiatives include:

- → **HKIA Debut Exhibition in Taiwan — "Past. Present. Future — Tracking**
- → **Hong Kong Architecture" (September — October 2015)**
- → **Hong Kong Exhibition "Stratagems in Architecture: Hong Kong in Venice" as a Collateral Event of 15 th International Architecture Exhibition La Biennale di Venezia (June — November 2016)**
- → **HKIA REVEAL 2 Exhibition — For the City. For the Community (September 2016)**
- → **Innovative Youth Housing Design Competition and Construction (July — December 2016)**

The theme of this issue is **Occupy Housing.** You would be given a gist of the winning projects of Innovative Youth Housing Design Competition and Construction in this issue. On top of this, an Editorial Board led by Professor Weijen Wang and supported by two co-Chief Editors Thomas Tsang and Thomas Chung would give you a bird's-eye view on **Housing** development in Hong Kong.

Architects are sterling contributors to develop housing into a healthy, low-carbon, resource-efficient and smart metropolis that is in harmony with nature. In recent decades, we have been facing increasing expectation from clients, end-users, members and society. New values have emerged in the remit of heritage conservation, urban design, and sustainable environments. Our members are progressively contributing to our housing development by unleashing their creativities, initiatives and ambitions.

On behalf of the Institute, I would like to express sincere thanks to Editorial Director Professor Wang Weijen and his team for producing and delivering this wonderful journal.

I hope you will enjoy reading it.

With best wishes for the New Year!
Vincent NG Wing-shun, JP
HKIA President 2015 — 16

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Thomas Chung / Thomas Tsang / Weijen Wang
鍾宏亮 / 曾慶豪 / 王維仁

Occupy Housing

香港住宅

A new journal from Hong Kong by the Institute of Architects situates itself within the city's complex landscape of densities, intensities and contrasts. Each issue addresses a single topic, documenting its trajectory as well as gathering contemporary narratives and practices from its home city. Engaging fundamental architectural issues from which to consider the cultural, economic, technological and socio-political changes we are confronting, **Occupy** seeks multiple perspectives and critical reflections in order to propagate architectural zeitgeists for the region. Aspiring to inaugurate a collective discourse on architecture for Hong Kong, **Occupy** strives to make room for posing vigilant questions on architecture and urbanism to the world.

Occupy Housing

The first issue of **Occupy** is dedicated to housing. Architecture plays many essential roles in the fabric of the built environment, but with expanding populations and chronic shortages in affordable housing facing every global city, it is the perennial inadequacy of equitable provision of shelter for all that is arguably the discipline's ultimate exigency in the 21 st century urban reality. Hong Kong has once been held up as a remarkable exemplar in tackling such issues with significant efforts; yet if housing is to retain its key influence and relevance in addressing our city's rising discontent and increasingly polarized social tensions, it is high time to reflect on what have we achieved, and contemplate what we can envision for the betterment of Hong Kong's architecture and urbanism through housing design.

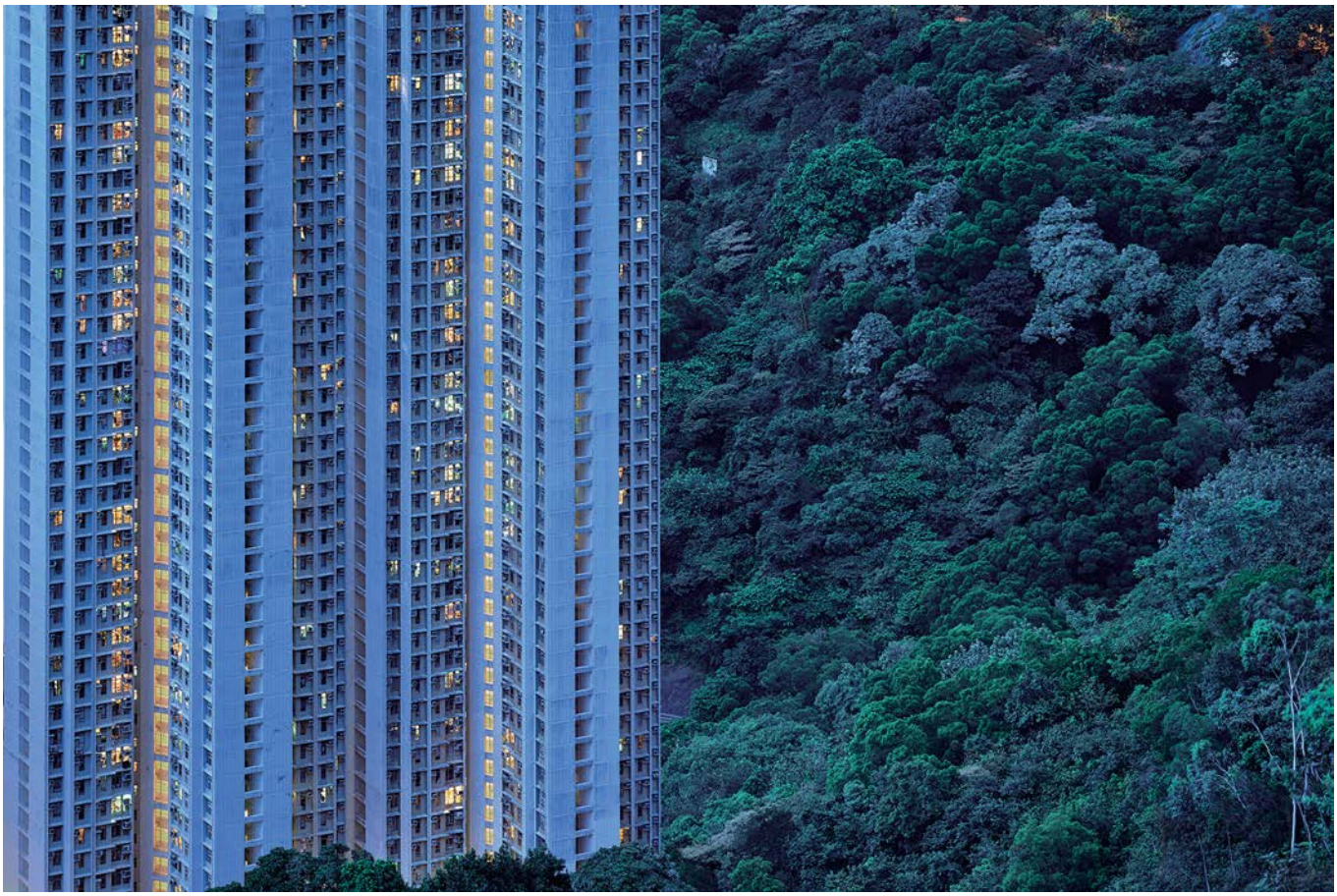
Occupy Housing 2016 began by hosting a forum with fellow architects that asked, "Is there still room for architecture in Hong Kong's housing?" Recognizing Hong Kong's early accomplishments in modern housing provision, we interviewed Donald Liao and James Kinoshita, while through Gu Daqing's research at the Chinese University of Hong Kong, we reviewed the significant architectural contribution of public housing projects of in the city's "early modern" era. Foregrounding the condition of Hong Kong's contemporary housing, we spoke with Rosman Wai who shared her views on current public housing strategies, while also outlining relatively recent award-winning private projects working with the city's dense urban fabric.

In the subsequent essays of reflection, we not only posed questions through institutional and social-economical perspectives, we also intended to ask ourselves: in addition to innovative practices of urban infill or furniture installations, beyond the podium-tower typology and tactics of uniform extrusion and modular assemblage, do we still have room for architectural design in large scale housing? Why are there still opportunities for architecture in housing for places like Singapore and China, and why developers in Taipei are still making an effort to "imagine homes" through housing design in the near future? Between the hegemony of capital and bureaucratic management, how can we continue to foster more inclusive design in Hong Kong's housing?

When it comes to discussing housing, opinion often separates into two distinct camps. One is to highlight the good intentions of architectural strategies that try to provide adequate, measurable solutions while not raising one's head above the parapet of ideology. The other is to lay the blame on wider socio-political and economic conditions as the core of problem and not architecture itself. Which side should we take? How can we comply with the myriad constraints in current housing practice demanded from developers and the authorities, while still being able to effectively strategize housing as a vehicle for an equitable urban commons through design? We continue in our search for modes of practice that clear away obstacles in the way of architects implementing thoughtful designs, because without architectural imagination, housing would cease to occupy its proactive role in offering enduring dwelling in the city.

Modern

Nature




17m
Clearance

Density

Hong Kong Housing Room for Architecture?

論壇: 香港住宅還有建築嗎?

A forum bringing together key figures from the government, private sector and the academics on the discourse of housing. Between criticism and defence, our panelists dig deep into the core issues, examine obstacles, and identify what it will take for Hong Kong to become a more livable city for all.
— 6th August 2016 HKIA Premises —

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Wilfred Yeung (WY)
Head of Property Project, MTR Corporation Limited

Housing
is the most important component of our urban form, and housing is also our urban fabric and public spaces. Hong Kong started to build successful housing projects since the postwar. Its public housing policy as well as the developments of its high-rise housing typology had since been considered one of the most successful housing models worldwide.
Not only to celebrate the past achievement but also to look forward: how can we provide better housing design for tomorrow? Many of us are frustrated by the repetitive podium-tower housing developed from the extrusion of extremely efficient plan-layout, and wondering if we can still explore housing design differently.
In the first 25-years of HKIA Design Award history, 1965 to 1990, about fifteen housing projects received the HKIA Design Awards, and were all public housing. For the second 25-years from 1990 to 2015, we have only about five housing projects awarded for HKIA Design Award. The questions that come to us are: if housing is important in Hong Kong, why are they not recognized for its design merits in recent years? What went wrong with our mechanism of practice, and how can we make housing more than just issues of housing management and land policy?
If we are able to design good housing thirty years ago, how can we still able to attract young talented architects committed to design good housing today?
Is there still room for design in Hong Kong's housing?
WW

Let's get to the heart of the problem: What were the critical issues that housing faced in Hong Kong in the last ten years? (both public and private sectors)

Today, we are not talking about insufficient shelters. If you look at the figures, Hong Kong has about 2.4 million households, and there are roughly an equal number of housing units already. Comparatively, we are not actually in the third world, where ownership is a problem. So it is not a quantity issue; it is a quality issue and a mismatch between supply and demand.
I just want to go back to Le Corbusier's book *Towards A New Architecture*. He said that the problem in housing is the root cause of social unrest and appropriate architecture or revolution. If you look at our society today, we are facing the same problem because of the wealth inequality problem and the affordability of housing. In Hong Kong, I think the government has realised that the private sector by itself can never actually satisfy the total housing need of Hong Kong people.
Housing has been treated as a commodity for trading rather than for living or enabling quality of life. When you look at a lot of recent private housing projects—yes, they have been successful in terms of financial return for both the developers and the users. But are we improving the urban environment? Probably not. So, if we are looking for a way out, for new architecture and innovative designs and so on, I think a change of values is actually the key. If we change the way our society sees housing, we will have new housing and new architecture. DC

Values

Outdated Design

In the past century, we were still using the same models that our masters had left us. This may not fit into today's lifestyle. Nowadays, more people want to live independent of their families. However, we are mainly producing housing that are designed for families. Our single person units or elderly units are in fact just a family flat with reduced area; and we call them individual flats. I think this is where the problem lies. We do not have the diversity to suit different needs. We only have the design of family flats at the moment. RW

Hiatus

When we stopped the sale and construction of the Housing Ownership Scheme (HOS), the private sector also stopped the development of medium-end private housing. They kept building and branding luxury apartments within single unit blocks in town. So when we removed HOS out of the equation, private sector also removed the same market from Hong Kong. Since then, there has been a widening gap between public housing and private housing. Which means there are only public rental housing and the luxury apartments market. AF

Dream House

We talked to many young people; we asked them what their dream house is. I thought their answer would be something really fascinating. But here are some typical answers: "My dream house would be one with French windows", "In my dream house, I would have a bed that is accessible from three sides". It is clear that they want a place, a quiet place. It reflects a vicious circle—we have been providing these kinds of standard plans: the diamond plan,

the cross plan, etc.; our young people living in these standard flats don't see any other alternatives. And so they think what is available out there is already good enough. That is a sad thing. RW

We design very much of what we experienced—we are used to something at home, when we need design, you can design the same thing. RL

We fail ourselves

We have been very successful, we have executed very good housing projects 50 years ago. It's like we have invented propeller airplanes, and right now we are still building that. We say, "Hey! This is the standard. This is good!" I said no. We have failed ourselves. In fact, we have set too low a standard. We don't demand quality housing for our community. And the problem is that we are allowing this myth to perpetuate itself. We have uninitiated the user to demand more. DC

Segregation

In Hong Kong, when you live in a high-rise, you live in a flat—you are so isolated, you don't see your neighbours—if you see your neighbours, it probably means something bad happened. I think Hong Kong somehow has become too segregated; you live in one of the pigeon holes. RL

I don't think we should blame the immigrants for our housing problems. Hong Kong has been a city of immigrants. If you look at the figures, I think if we could provide sufficient infrastructure—in fact we do have the wealth to do that—there's no problem with importing talents. I mean, Hong Kong does not really have valuable natural resources; what we have are talents. DC

What is in the way
What are the social, economic, and political challenges that stand in the way of innovative architectural solutions for housing amid rapid urban growth?

Equality

Our society does not have a fair system—when it favours certain selected vested interests, these small groups have the power to cause great influences to further their self-interest at the expense of the society. But do we want such system to remain in our society? Will our younger generation accept such a society? We need to debate that and we need to make changes.
I am optimistic in the sense that technology will enhance productivity so greatly that we will have sufficient wealth for everybody to share. The only problem is that right now the distribution system is not fair—1% of the population are keeping 99% of the wealth, leaving the rest for the other 99% who are in the bottom sector of the community. That is the problem. I don't see the problem with changing our tax system, e.g. increasing our

profit cap by 1% will not drive out all our business. As long as they can make profit, they don't mind paying more profit tax. DC

Money

I don't think it is fair to say that we are not doing well in terms of architecture of our housing projects. If you look back at the past 20 years, the quality has actually lifted. If you go to Mei Foo, and then the next stage like Laguna City, look at the quality and the finishes and details in the residential properties, actually they are really good in some ways. You are right, they look more alike. Because unfortunately private projects are commodities, they are big investments. That is true. We are talking about $6 billion, or easily $4 billion at least; $6—10 billion profit. Developers have to look for profits, there are a lot of risks in doing these types of projects. Honestly, our fellow architects actually put a lot of effort into the buildings. One thing I will say is, our building code is really relatively restricted in terms of investment. No developer is willing to lose GFA, and our code is really strict on what you can do. Sometimes if you want a bit of flair and freedom, it costs you. And developers are not going to do that, they will only do the best they could to deliver a good building. It's hard for them. WY

Everything has a price

Politics

We evaluate good architecture from a very academic traditional framework; to a certain extent, a formalist manner. Architecture has moved away from that already. When we talk about technology, sustainability and all that, I wonder how many housing estates have passed that standard. It's a big problem obviously. It's not going to be solved by architects alone. We do not have that power, despite that we do want to have and think we have that power. We don't! It is an issue that requires the whole community to come together and to a certain extent, regulations need to be changed, policies need to be changed. Joseph Stiglitz, Nobel laureate in Economics, when he was asked how to improve the economy, his answer was that, it's not the economy, it's politics. I think in housing, it is not the architecture. It is the housing policies and the regulations.
First of all ... what values do we value? New values bring out innovation, because we need to have a product that satisfies the new values. We don't see any innovations nowadays, because we are sticking to the old values. Oh I'm buying a flat, not as a home, but as a commodity, so I don't care if it is good enough for me to ive in as long as I can make a profit. DC

Selfish

Short-sightess

The problem is that, we are being selfish. When we talk about building a community in this nice city, we don't actually care about what is around us. And I think the Hong Kong society failed in that because we have become so selfish now. As long as people think they have a nice flat and a nice estate to live in, they don't care about the rest. I think that is the problem and architects should not play along with that game. The government has done their study on 10-year long term housing need. But the missing point is that they are looking at Hong Kong within existing boundaries. There is no integration with the Pearl River Delta. That is actually going to be the major game changer. It doesn't matter how much we don't want the integration; it is coming and accelerating; and it is coming faster than we want. In 2047, there won't be any border. DC

Some policies with good intentions will end up being abused. This is the problem. The downside risk. AF

How to be good What are the important aspects in quality housing design?

Street

What I find we are missing in Hong Kong is actually the old shop houses. The street in those days weren't so busy, so the kids all played together on the streets, all the adults know whose kids they were, and they kept an eye on them, so they played safely and harmoniously. And this is something that is kind of missing now in the society. RL

The reason that there are no shop houses anymore is because there are no streets anymore. So this all goes back to this sort of community space. WY

Community

We need to look at what constitutes a neighbourhood. There's no way we get a house up in the hill and beach somewhere with nothing around you. I think you need to look at who is in the community. It is proven that people live longer in a community, when you have friends who support you, and when you are active at work. I think we need to provide that sort of housing for people in Hong Kong. It's not just housing, but many things as well, infrastructure, access roads, traffic and all that. Also social needs, welfare, hospitalization, recreational, F&B; you need to live in a place with access to these sort of things. RL

The public space will be in the air (internet/mobile phone). We need to know what people want, but not what we think they want. WY

Observe

It's very important to know how people interact with each other, and how people live. Because for example, if you are designing something for Hong Kong, and you are asked to do something in Guangzhou, you cannot take the plan from Hong Kong and put it in Guangzhou, because in every city, every area, people live differently. What we think is a norm is not a norm for our clients who we are designing for. So I think it's very important that we need to understand how people live and interact, how they carry out their daily routines and do things. RL

Comme il faut

Quality means fitness for purpose, if you want people to live happily, think about what they need. Healthy living is obviously one thing, and also convenience, convenience for traveling, for shopping, for elderly services or youth services or family services, and human comfort, and living in the company of others. I think these are the kind of seeds that we want. I think these are the essentials. If you think Hong Kong is so bad and poor, then look at life expectancy. Hong Kong has the longest life expectancy for both male and female now, it is longer than Japan or the Nordic countries. So there must be something in Hong Kong, that we have and is unique, that we should be proud of. So we have the smallest unit of area per person, we live in the highest density and most polluted city, right? But how come we have the longest life expectancy? AF

Where is the architect? Being aware of our challenges, do we have room for architecture for housing in the coming decade? What should be the roles and responsibilities of the architect, private developer, government bodies?

True competition

I am a believer in the market, under certain just social system. In the sense that, you have true competition. True competition will actually take away the excessive profit. So that in any true competition, profits will eventually be diminished and will be disrupted by new business models and new technologies. DC

Universal Design

I am not a firm believer in segregation, I believe in universal design. Given that Hong Kong will have a high aging population, so just design every estate as it is an old people's home, from estate to flat, from each to every detail, to care for people of different ages and abilities. Even if they are young, they maybe disabled or handicapped, so we have to care for everyone. I do not believe in segregating housing for elderly, housing for youth, and then housing for the singletons, and housing for the families. AF

Blind Spot

I am not saying segregating them. But I think there should be variety, because right now, we do not. Why do we not have innovations in design in recent years? It is because we have not tried to grasp the problem in order to solve it. If we want to drive new design and quality, regulation is one of the things that we can use as a tool to promote what the government and the community truly wants. This is a good driver.
We need to have a new type of housing design, to suit different tiers of people. We need to maintain the housing ladder, which has proven to work since the 1960s, when we had housing reform. We used to have different ladders in the society, like the licensed squatters, transit centers, resettlement housing, government low-cost housing, Housing Authority low-cost housing, and then the HOS. It proved to work because in 2003 when we stopped the HOS, we could see the immediate crisis after taking one of the steps out of the housing ladder. RW

Keep the ball rolling

What is housing for? Is it for wealth preservation, collection, trading, profit? Or for enhancing the quality of life? They are totally different. If we can figure out the answer to that, I think Hong Kong housing will actually improve tremendously. DC

I think the main aim of Hong Kong public housing, is to leave wealth with the people (藏富於民), but not by the public sector or government. AF

Master Planning

When we do a township, there should be a master plan. We need to know the density, the demographic profile of people, and their needs. RL

I think master planning is the Planning Department's purview. The Hong Kong Planning Standard & Guidelines prescribes for whatever population in the public and private neighbourhoods, there should be certain types of facilities. And if these are not provided in the private sector, they will be provided in the public sector to serve the community as a whole. Architects are not in that position to prescribe what to put. It's the planner's purview. I think it is not an architect's abrogation to propose, but rather the planner's. AF

Of course quantity wise, that's I think is the planner's job (to do master planning). But then quality wise, like how to design and build a community that is family friendly, I think that is something architects can work on. RW

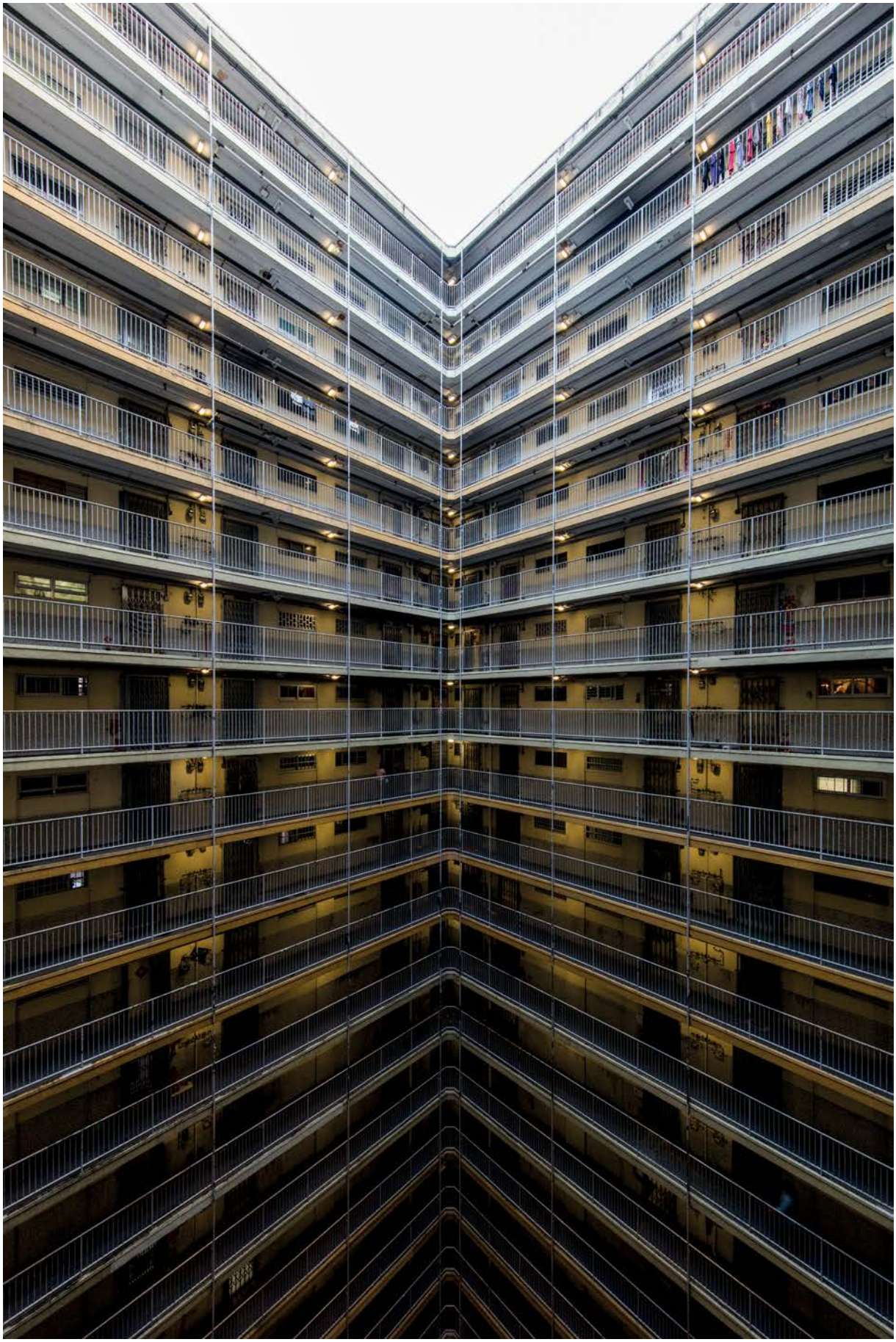
Power of Design

I still believe in the power of design. We should do more research, and look at the scientific feedback on how built environment can affect behaviour. Those are our tools. If we cannot change the programme, we need to use the design tools to encourage desirable action and enhance communication.
First of all housing needs to be well designed, but also with the help of technology, we can have mass customization at the same cost or even lower. It doesn't mean that you are always repeating something, that the design always need to be standardised. With today's technology, manufacturing, the use of BIM, computer technology and artificial machines, I think it doesn't matter if the laser cutter is going to cut a square or a circle. It's the same cost.
Back to the elimination of the shop houses, government could do something about it. Right now they are standardizing and sanitizing through the Outline Zoning Plan—residential is residential, commercial is commercial, we cannot mix them. Obviously if you look around the world, there are a lot of successful models of vertical mixed-use developments. If you want to revitalize industrial buildings, as long as safety and hygienic conditions are met, why don't you open it for loft living, commercial, all kinds of usages? We need to change, to revise our value system. DC


Occupy:
Housing
What are the
important
aspects in
quality housing
design
?

Modern
現代

Wah Fu Estate



Wah Fu Estate

Cho Yiu Chuen

Kwai Shing West Estate

A Conversation with Donald Liao Define. Design. Direct.

與廖本懷對話

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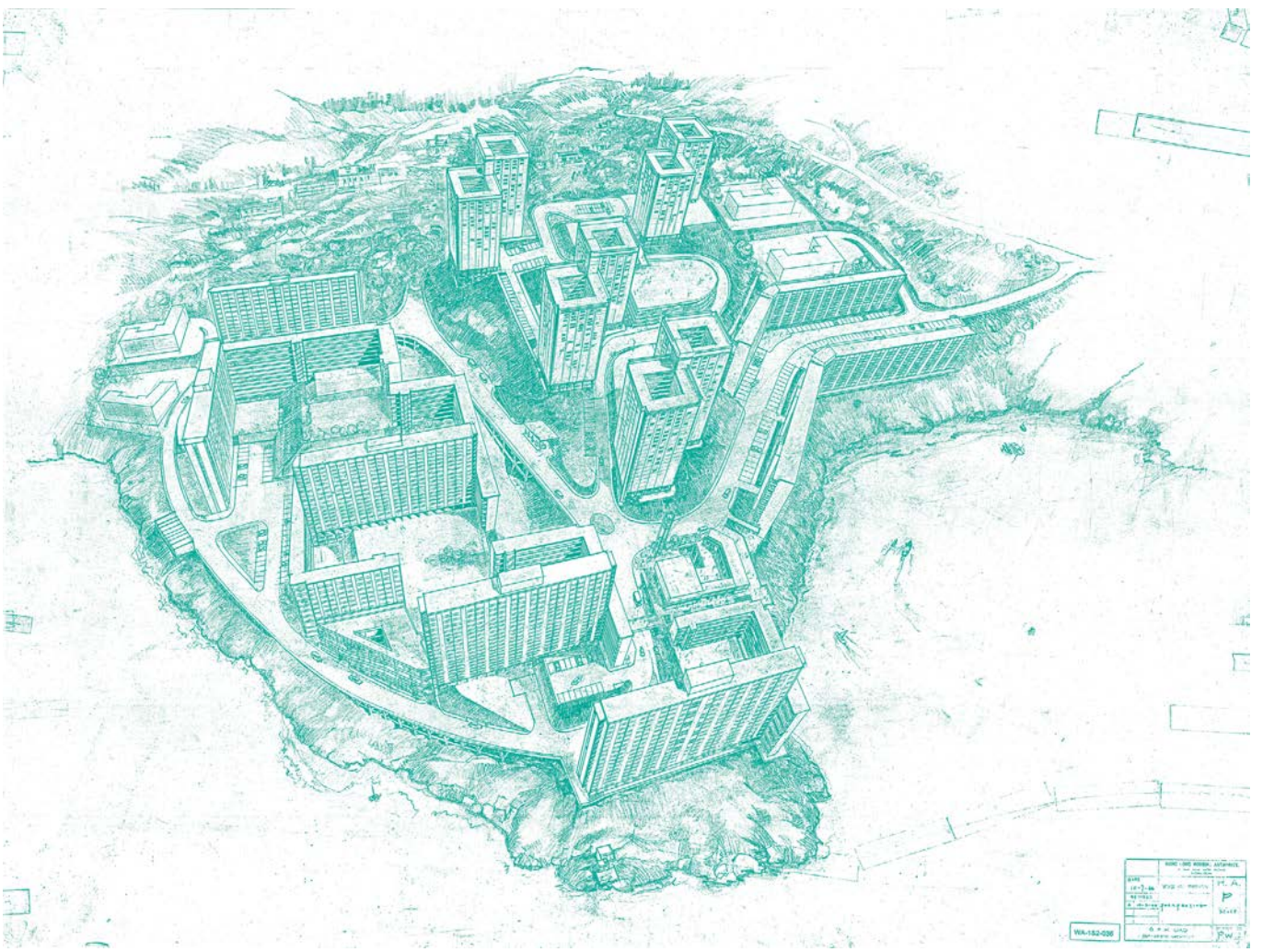

Pioneering architect, former Secretary for Housing and former Secretary for District Administration in colonial Hong Kong, Donald Liao Poon-huai had an extraordinary career, and remains an inspirational figure for the city's architects and beyond. From his fortuitous arrival in Hong Kong from Taiwan, graduating from the first architecture class at The University of Hong Kong, to studying landscape architecture in Durham on a scholarship, Liao's continual striving for the betterment of one's lot was already apparent during his formative years. Designing the iconic Wah Fu Estate (1968) at the age of 30, having formulated the Ten-Year Housing Programme (1972) and advocated the Home Ownership Scheme (1976), Liao has radically transformed Hong Kong's public housing development both as an architect and later as a civil servant. Liao's belief in his mission to provide decent living space for the grassroots drove his innovative ideas such as the "self-contained unit," the "double-donut" design and other housing typologies first realized in Wah Fu that became the definitive exemplar for many subsequent estates. From Ma Tau Wai Estate (1962) to Oi Man Estate (1974), his work has not only uplifted the quality of life of hundreds of thousands of local people but also generated the emergence of the Hong Kong identity. Twenty-seven years since his retirement, Liao remains vivid and voluble at age 86 as he talks about himself, housing, and architecture.

Interviewers: Weijen Wang
Corrin Chan
Thomas Chung
Han Man
Winnie Au
Kevin Lin

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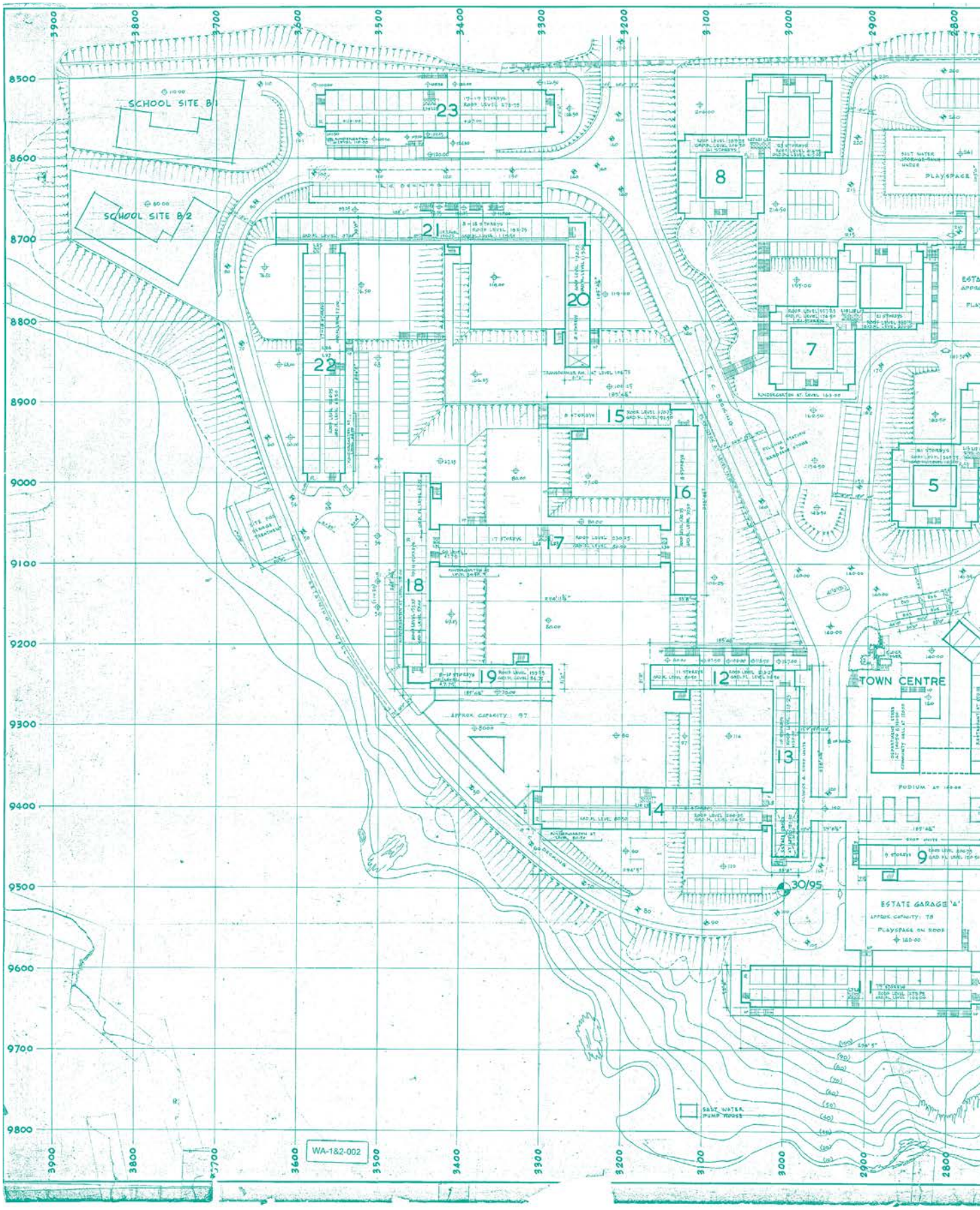
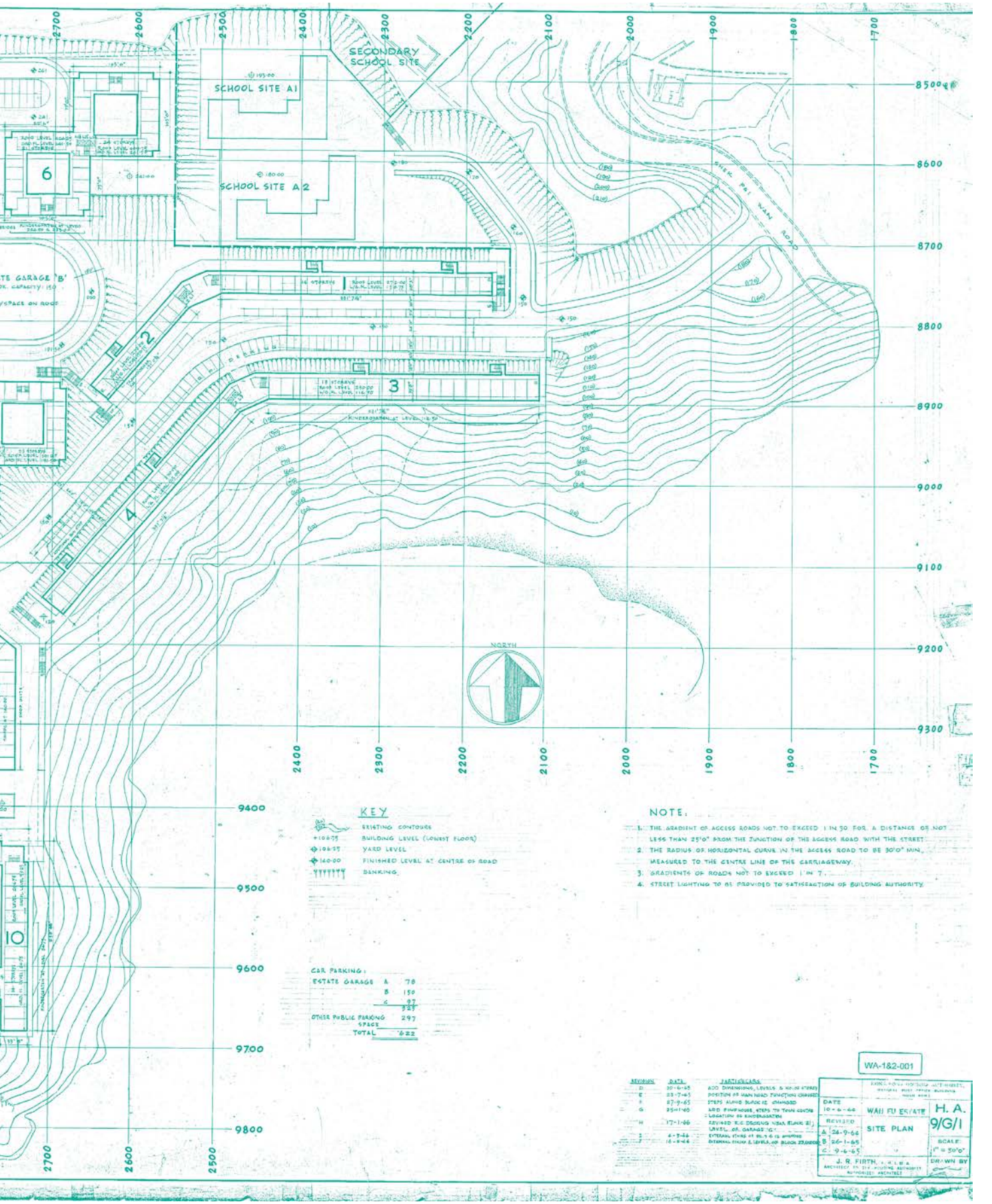
1 Perspective of Wah Fu Estate by Mr Liao
Hong Kong Housing Authority
2 Mr Liao explaining his design vision of
Wah Fu as a town / Photograph by Kevin Lin

Wah Fu Estate 華富邨





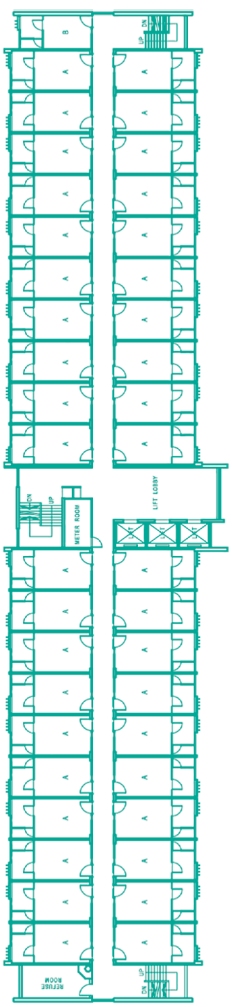
3 Master Plan of Wah Fu Estate / Hong Kong Housing Authority

Occupy

Born and raised in Taiwan, could you tell us about your native childhood? How has your experience in Taiwan shaped you as an architect?

Donald Liao

I grew up in a very idyllic environment. Xiluo in Yunlin County is a small town in central Taiwan. It was a rice producing area; parts of it existed since the beginning of the Qing Dynasty, and six generations of my family had lived there. When I was seven, my father had our house built. I remember that an architect and later a team of workers came to live with us for a year to build the house.
I saw the blueprint, and that was my first encounter with architecture.



4 Typical Floor Plan of Slab Block / Hong Kong Housing Authority

While handling the first large-scale public housing project in Hong Kong at the age of 30, how did you find self-assurance in your design and manage to push through such a revolutionary design?

The good thing was that we were the seller, and it was a seller's market in those days. The users didn't complain. But I felt that as a seller, I had the responsibility to deliver proper goods. My first and foremost theory and conviction was that every single unit must be self-contained and small but at the same time maximally equipped (麻雀雖小，五臟俱全). It must meet the daily needs of the housewives. It must have a toilet, a kitchen, and a place like a balcony where youngsters can do their homework and so on, and the bedroom divided up there. It's a self-contained unit. Now, this revolutionized it (the public housing norm), that was my bottom line...
If you didn't like me, you could sack me, and I could go out to practice, but I insisted that every unit must be self-contained, and that was my first terms of reference...

The rest that I advocated was open space, and the design of the landscape. The trees are essential. The square concept probably came from my British influence. I like squares because, in congested areas in cities like London, you have all these green areas... One thing about London is that—this is what Gordon Brown (founder of the Department of Architecture, HKU; professor of Liao; 1950) told me—every corner you go, you can see some green, and that's the way I wanted it to be in this highly congested city. In those days, we didn't have any guidelines. What we did was 2,000 people per acre, and this was unheard of, you know, if you went to school in England, people would say you're crazy. Hong Kong was building from hand to mouth, for every site we got from the Public Works Department, we had to make full use of it.

So the key elements are the self-contained unit, the landscape, and the square. And also dignity for the people?

You have to give people what they need, the minimum requirements... Well, no luxury I can assure, that in all the public housing, as far as I'm concerned. But my belief is that the lower income group made a contribution to the city. When Hong Kong was transforming from a sleepy town into an industrial manufacturing society, many of these people contributed to Hong Kong's prosperity; therefore, they deserved what the public housing could provide them with. ... To live a happy and stable life (安居樂業) is essential. You know, it's an age-old concept. What can we give them? The minimum requirements.

It was ground-breaking during the 60s that strong emphasis was put on preserving the landscape and maintaining acommunity in the design of Wah Fu. Could you tell us how all these began?

So firstly it was the size of the project. I was familiar with England particularly... In my brief, I used to say that I used

the population of Guildford (as reference). It is a famous city, which had a population of 50,000 people. Then I put 50,000 people on my 24 acres (site of Wah Fu). So that was my size, the size of my task. This was what I was going to do, to provide housing for 50,000 people… Of course, community came first. I didn't want to just create another concrete jungle; I wanted to create something where 50,000 people could live happily and conveniently in.

I wanted to create something that retains the characteristics of the site. That was (basically) the big concept. Within this concept, I must cater for the needs of the people… You have schools. You have buses. They must have shopping opportunities. They must have a library, a market. I designed a market underneath the town centre. Away from the main shopping area, a decent-size Chinese restaurant (酒樓) where people can go yum-cha, hold banquets, and so on… This was all about the concept. Then the ground floors of the buildings were used as shops. But I wanted to create a town centre… This was how I tried to create this. I tried to create some elderly homes, which was easily accessible from the town centre, and at the same level with Wah Hong Building. That was the first time ever in public housing — Wah Hong Elderly Hostel. The elderly hostel was immediately above a kindergarten. People said, "Oh! Why do you want an elderly home (with a kindergarten below), making all the noise?" In fact, elderly people were always leaning out and looking at the youngsters playing. They liked that the youngsters were making noises.

So, I did a lot of experiments in the town centre. Car parks in low-cost housing — people said: "this was a luxurious thing." No, it was not a luxurious thing; it was essential because the time was coming… people were having cars… When people had cars, they would be crowding up the streets blocking fire engines and ambulances. So I was trying to get the cars off the street. It was the first time in public housing when I built the three multi-storey car parks. In these two (pointing at the master plan), the rooftop is used as a playground. The third one is interesting. This one is the continuation of the town centre… I don't know where you got this drawing. This is my original drawing; I had a clock tower here…

We did some calculations on the past HKIA Awards. In the first 25 years, from 1965 to 1990, many awarded projects were housing projects — public and private. From 1990 onwards, very few housing projects were awarded. And in the past 10 years, only one project was awarded. This is a big question for us. Housing is important. It is urban fabric; it is habitation; it is architecture. But how has housing ceased to be architecture in Hong Kong and what made that happen?

Housing was the pride of Hong Kong in the 60s, 70s and 80s, politically and socially. Architecture is, of course, you know, what you're all interested in… But most importantly, politics (is the reason). I always say that when you are into politics, housing is basic; it's the most effective card to play… That is the best way to get your votes. I like to think that my work was bearing fruit. I put all my life, my interest into housing — 25 years of the best time of my life and it bore fruit — Wah Fu, Oi Man, and Wo Che in Shatin…

I created the Home Ownership Scheme (HOS)… The concept is nothing new, but in Hong Kong it's new, and the concept was not just about building something for housing. The society was progressing, people were making more money — people could afford it. If you have something which would attract people from living in public housing to trade up, to move up in the economic and social life, then you are actually doing service. For the first batch of HOS, there were six schemes which I had to start with. I employed more architects within the Housing Department, to be in charge of the HOS. We gave three projects to private firms. In a way I created competition among them. Because three or four teams were doing similar types of jobs; in terms of design, I gave them some competition. Subsequent to that I also invented the Private Sector Participation Scheme (PSPS). The reason was, as I started working on the HOS, there were murmurs from the private sector that it was taking the rice bowl away from them. So one day I invited some of the leading developers to the Executive Council Chamber; by then I was the Secretary for Housing, and said to them, "if you can't fight against it and if you can't compete with it, join it." It's alright if you would not go to the extent of HOS to subsidize. That's how we started the halfway housing — we would get the government to provide the land; you'd design the HOS projects, you'd keep all the shops, markets, car parks, but leave the residential units to the Housing Authority. The Housing Authority would guarantee the predetermined sale price and give it back to you.

There were quite a few PSPS back then. I'm not saying that whatever I invented or advocated was perfect. At least it was a trial. It's a beginning. It's a concept about meeting the social needs. At the same time, the private sector and private developers could get their (own) architects and they could compete with what we were doing. In the 60s and 70s, many of our schemes won HKIA prizes. We put it as a challenge to the private sector — the Housing Department was doing this, see if you could do it better. As you said, we didn't give you jobs, because we did it better than you.

Now that Hong Kong has become materially more well-off, most apartments today are well-equipped and leisure amenities are readily available. But it doesn't seem like people are living a happier life. What do you think is now missing in Hong Kong's housing?

Over the years, although we had a ten-year housing programme thinking that we would solve the problem as our society develops, as immigrants come in, as families expand… The NEED is always there. It is wrong to say that we have enough, or we should stop building rental housing. Of course, the private sector says that we are taking

the rice bowl away from them. That means competition. If not, they can mark up the price. That is not the way things are. This world is here for all to live. The private sector can build the expensive ones, you have the middle ones, and then lower ones, there is a NEED for all these levels in our society. We have to recognize that the need out there and thus to cope with it. It so happens that a certain sector of public housing is not catered for. Some say that things are now developed; it's different, politically. The youngsters are thinking differently.

In the old days, beginning from the 50s, (people) moved into resettlement. If they had a roof—something at least concrete that wouldn't burn like the squatter huts—for them, it was good enough. When I came in, I came in as belonging to a certain level. I said, "that was my level, I would not go down, from here I would move up." And now, you can say people are not happy just moving into public housing, they will complain about whatever there is; that seems to be the case. But that is the price you pay with life that is too comfortable. In the 50s the parents worked very hard, children went to school, there was no issue like Occupy Central, never. The concept would not occur to them and people didn't have the time for it. Of course, society has moved up. People are better educated and better off. You have the basic needs, so you look for other things, including the increased demand for housing.

I can defend if I were doing it now. I would still do the same, providing the basic upward mobility. And now they are building housing with two-bedroom flats or bigger; it's good because people could afford it. People should be able to; people deserve to live in something more comfortable compared to 1950s. It just happens the concrete box is not enough—CORRECT—Hong Kong must move forward, and we should be looking forward to something better. But architecturally, this has to translate into a design. My ultimate hope is that whatever the design is, housing should be able to merge into the bigger development of the town, and not just be an isolated estate. Whether this has been done, I don't know. But my idea is that, I do want Wah Fu and Chi Fu to mingle and become one community, but not be isolated as separate housing estates.

Regarding what housing can do, the situation nowadays we are discussing have become much more complicated, and social movements like Occupy Central have occurred. Back in 1967, Hong Kong had its biggest riot, and in 1968 there was the world student movement in Paris. It was a time of significant changes socially and politically, but somehow you were able to make projects like Wah Fu happen.

In 1967, I was Chief Architect of Ma Tau Wai Estate. The design of Wah Fu was finished, and the riot came. But you know, all through the riot, not a single incident happened within the Housing Authority estates. Within Wah Fu, within So Uk, within Choi Hung, and so on. All the troubles happened in the resettlement area. This explains that if you provide people with the (basic) necessities (衣食住行), if you have proper housing, it's one of the best ways to stabilize society. You know people are unhappy living in the box in the hot summer days, get fed up… all that… You know riots could easily happen.

Back in 1967 people were throwing bombs. In Occupy Central there were no bombs.

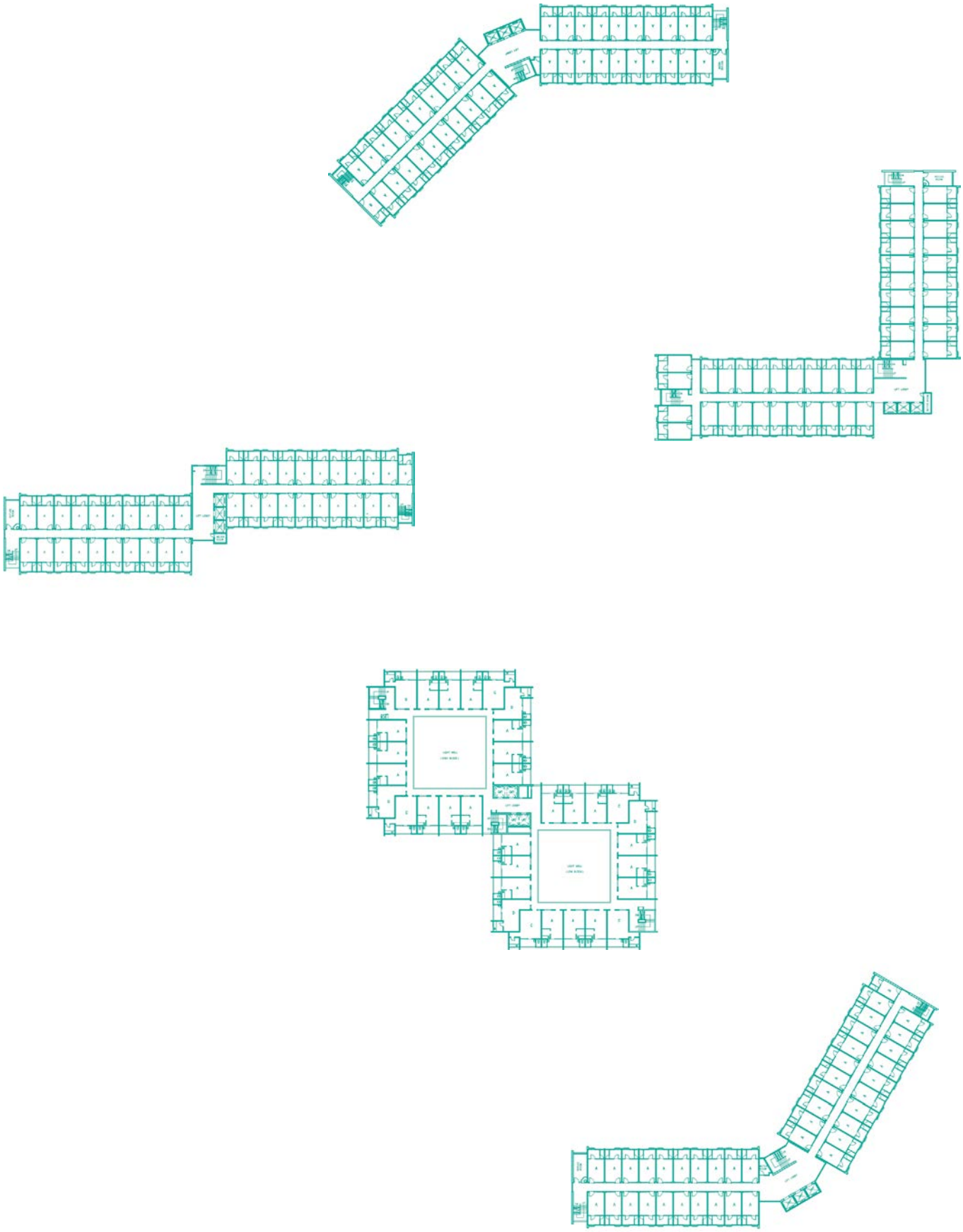
I'm not criticizing Occupy Central or such. What I was saying is, people have more time and more leisure to do it.

So every era has its problem.

There's a difference in the people who are creating the problems. 1967 was the direct influence of Cultural Revolution across the border. That was the trigger in Hong Kong. The strike came mainly from China. I remember people leaving Hong Kong; they didn't know what to do. My head office was then in Ma Tau Wai. One morning I went to the office, as I got out of the car, I saw Gurkha soldiers carrying machine guns guarding the office. I said, "God, what the hell are you doing in my office?" A soldier said, "No no no, my colleagues are using your toilet." So his friends were in the toilet, and he was with the machine guns waiting! I think the helicopter landed on the rooftop of neighbouring stronghold of the strikers in 1967.

In 2014, the government officially announced that Wah Fu would be redeveloped. Has that been decided? What are your thoughts on this, to bring new life to the place?

I don't know… If they decide to redevelop Wah Fu for political reasons or just for the sake of increasing the population, it would be playing the numbers game. In my days it served 2,000 persons per acre, if I made it 2,500 or 3,000 per acre all it means is instead of building 24 floors we build 48 floors and the population could of course increase within the given site, (but) that is not the way to do it. If we want to improve the area, old buildings can be kept, renovated and revitalized; redevelopment doesn't necessarily mean completely flattening everything. I'm just hoping that whoever eventually redevelops Wah Fu will make it more meaningful, more useful, more attractive and more exciting.



5 Typical Floor Plan of Slab Block and Twin Tower / Hong Kong Housing Authority

Wah Fu Estate

華富邨

Model of an era

In 1954 the first Mark I resettlement blocks were erected after the Shek Kip Mei squatter fire; in 1957 North Point Estate became Hong Kong's first purpose-built public housing; while by 1963 So Uk became the largest public estate for 33,000 people. Yet in more ways than one, it was Wah Fu Estate that revolutionized Hong Kong's public housing design. Wah Fu (phase 1: 1961—1968), the first of its kind to be conceived as a self-sufficient community, was the brainchild of architect Donald Liao. Liao's vision encompassed the project's comprehensive design, from siting and landscape, communal and amenity programmes, to residential type innovations. More importantly, it was Liao's insistence to have independent flats for every family that marked out Wah Fu from previous estates that had shared facilities.

As the eighth of ten estates built under the former Housing Authority's (屋宇建設委員會) Low Cost Housing Scheme, Wah Fu housed over 53,000 people on its 24 acre site.[1] With a condensed site coverage of 22%,[2] the estate was accommodating just under 2,000 persons per acre, a comparable provision of the standard of 35 sq. ft. per person in Hong Kong at the time.[3] By the time its second phase was completed in 1978, the entire estate contained 18 blocks with a total of 9,100 flats. Besides providing self-contained dwellings which included a separate kitchen, bathroom and living room, Wah Fu also had schools, banks, post-office, market, library, restaurants as well as multistorey carparks with children recreational areas on top. Liao often compares the scope of designing and constructing Wah Fu to that of building a small city in Europe.[4]

As the most ambitious public housing scheme realized, Wah Fu had attracted much publicity and international attention. It opened amid much fanfare, and the substantial social welfare improvement it offered was well-received by residents. The architecture also became the model for many subsequent housing design, both public and private estates.

Commoners' luxury living

> "Rocky beaches with hardly a soul on them. Boulders lapped by rippling water. Acres of hill sides shrub-bedecked and inviting. Spectacular sunsets behind islands dotted in myriads of gold and purple over the South China Sea."[5]

This 1973 South China Morning Post description of Wah Fu sounded like advertisement for a luxury resort. Indeed, it befits the undeveloped site, a south-facing headland in Telegraph Bay, on the remote west of Hong Kong island between Pok Fu Lam and Aberdeen. By forming stepped terraces along site contours and configuring buildings to suit, the Estate's design demonstrated sensitivity to retaining the headland topography. For Liao, the significance of landscape to evoke a sense of identity influenced how he integrated Wah Fu's design into the sloping site. Certainly, it is the unbeatable 180-degree sea view and proximity to scenic nature, together with the dwelling and communal facilities that compensated for its isolated location, attracted residents to move in from resettlement blocks, and earned Wah Fu's nickname as the "commoners' luxury apartments" (平民豪宅).

Model Type Designs

The estate comprises two main standard residential block types, the slab and "double-donut" or Twin Tower. For the slab type, similar to those deployed in previous estates, there are two access modes, via side corridor or central corridor. The latter ones are double-loaded and taller, installed With lifts to maximize their efficiency to serve more units, while the lower single-loaded side access ones tend to be I-shaped or L-shaped. Both slab types were further adjusted and combined in different ways to respond to topography and maximize sea view, while the different block heights further enhance the variety of resident experience and outdoor space definition.

The Twin Tower type first appeared in Wah Fu. Four Twin Towers (21—24 storeys) were nestled into the higher and steeper part of the site. Within each Twin Tower, one is three storeys higher than its twin, with the ground floor at different levels to suit the sloping site. The resultant staggered roof planes of the cluster produced an undulating skyline. On each floor, 34 balcony access flats are grouped around a 50×50 feet central atrium open to the sky for natural light and ventilation. Two squares are joined together at the corner by a common circulation core, fitted with four lifts and one staircase, and the tower dimensions were determined by the required fire escape distances on the two diagonal corners.[6] As a new type, the Twin Tower was later widely adopted in many other HA estates such as Oi Man, Wo Che, etc..

It is worth noting that these two types employed load-bearing partition walls, in contrast to the post and beam structure predominantly used in public housing designed by private architects. The load-bearing wall system proved popular for HA as it had advantages of reducing cost, speeding up construction by standardization, and eliminating unsightly beams or columns that would be exposed on the interior. While the system's inflexibility might be problematic in other buildings, the cross walls offer good wind resistance, which is particularly beneficial to the exposed twin towers at Wah Fu.

Another model future?

By the 1980s, there was increasing concern for the condition of the estate's aging building fabric. It was at that time that Wah Fu's redevelopment and even threat of demolition was first mooted, and major repairs including structural strengthening have since been carried out. Although in 2008 a Housing Department inspection confirmed the

buildings' structural safety, in 2014 the government officially announced the model estate's redevelopment. [7]

Built as a bold vision to meet basic needs back in the 1960s, Wah Fu's architecture is in need of a major overhaul after half a century's service. Changing circumstances meant that Wah Fu's population has halved to around 26,000 in the wait for regeneration, while greatly improved transport connections also spawned Residence Bel-Air, an upmarket private development next door. With a 250,000-long waiting list for public housing units, and tens of thousands reportedly crammed into subdivided flats, the task of providing liveable housing to alleviate the city's contemporary problems remains ever more urgent.

Will the next reincarnation of Wah Fu surrender to potential political wranglings, bureaucratic orthodoxy or repeat the problems of recent new towns elsewhere? Or will the new design rise up to the challenge and offer another inventive model for 21st century housing?

1 The final announced population was 53,910. Before, So Uk Estate (also of the same scheme, completed in 1963) is supposed to be the largest estate with a population of 33,000, which was "about the population of Salisbury, England." See *The Hong Kong & Far East Builder*, Vol.15, No.4, p.34.
2 *Far East Builder*, 1970.3. p.19.
3 The total site area of is 29.06 acres, meaning 1,855 persons per acre. This is comparable to: 1,768 persons per acre inHealthy Village (Hong Kong Housing Society, completed 1956); 1,737 persons per acre in So Uk Estate; 1,886 persons per acre in Ma Tau Wai Estate (1961—1965). Ibid, p.15.
4 Interview with Donald Liao, 2016.
5 Quoted in Fanny Fung, "Once an icon of low-cost living, Wah Fu Estate is finally getting the redevelopment residents hoped for", *South China Morning Post*, 10 May 2014.
6 *Far East Builder*, 1970.3. p.16 and p.19.
7 The currently projected date is around 2024 for the first batch of the redeveloped estate to be completed.

1 Aerial View Wah Fu Estate (1975)
Hong Kong Housing Authority
2 Wah Fu Estate (2016)
Photo Credit: Eagle Wu
3 Wah Fu Estate (1968)
Photo Credit: South China Morning Post

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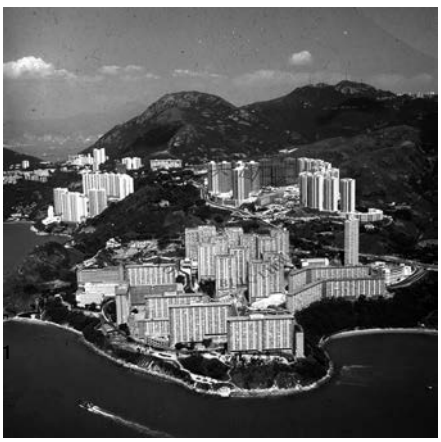

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A Conversation with James Kinoshita

與木下一對話

1

Interviewers:
Weijen Wang
Corrin Chan
Han Man
Winnie Au
Kevin Lin

2

1 Aerial Photo of Sui Wo Court P&T Architects & Engineers Ltd.
2 Ground View of Sui Wo Court P&T Architects & Engineers Ltd.

James Kinoshita's architectural legacy in Hong Kong is not limited to just iconic corporate towers in Central and academic campuses in Tsim Sha Tsui. The designer from Palmer & Turner, the city's oldest architectural firm, also made his mark on groundbreaking public housing projects.

Sui Wo Court near Fo Tan in the Sha Tin district was built in 1980 and its resident-minded scale and livable setting won a Silver Medal at the 1981 Hong Kong Institute of Architects Annual Awards. Featuring nine separate blocks with over 3,500 units, its innovative pinwheel design encouraged cross ventilation for airflow as well as social interaction in its common spaces. Lift lobbies were also situated every third floor to encourage more interaction.

It achieved all these aspects without sacrificing spatial efficiency or raising costs, which were the government's priority. His concept of a three-storey commercial block also gave residents more common area and greater communal stimulation. Impressively, the grounds still function superbly today. However, the project as a whole wasn't without its challenges, though in retrospect 35 years later, Kinoshita still recalls it fondly.

James Kinoshita / Photograph by Kevin Lin

Occupy
Tell us from the beginning about the original ideas for Sui Wo Court?

James Kinoshita
Well this is the public project I remember the most. Basically what started the whole thing was trying to create community spirit and neighborhood spirit, so we tried to have a common space that makes the people living there (feel) it is their own area. So, even the colour coding was done so each cluster has its own colour, has its own name, its own character.
With the planning of the units, the principle was to try to have quite an open space in the corridor so you don't have a very narrow or dark inner corridor. There had been a lot of problems with security so I tried to design something which was much more open, and so you could see everything and what's going on. Also, that helps to develop a closer relationship between each of the units so that the people would get to know each other better, and so by having the lift lobby on every third floor, you could gather more people together, and also it's more efficient. You get the lifts coming more frequently. The only thing is you have to walk up half a flight, but that's all, so for handicapped people it may be a problem but for ordinary people it's fine.

So each floor has 8 units, a lift lobby every three floor, and 24 families share each lobby. It's very different from current public housing where there are a thousand people and one podium, which is a huge difference from 24 units. Did you think about increasing that to 60 at least?

No, no. We tried to make the corridor short, too, in order to have that sense of security. By making the corridors short, you could see everything, see what's going on, and these corridors serve as staircases as well as access, so it doubles up not only as access staircase but escape staircases. Obviously, for the handicapped, the units where you do not have to go up and down are the ones suitable for them.

The pinwheel idea is also nice because the corridor ends up with the openings.

We tried to make each unit very similar, I think they are exactly the same height, but then one of the platforms was higher because of the land, the contour of the land. We tried to make it so you don't have to cross the road, so we built a bridge and put a lift there. Residents then can have communication within the whole estate without crossing the traffic.

That is very impressive—the bridge and the lift. This kind of sky street is very Peter and Alison Smithson in, that kind of British CIAM idea. Did they influence you at all?

No, just trying to bridge across...

So actually it was more a bottom up design process?

Yeah, that's right. I was trying to fit the pieces together, ordering it around, and it came out to this kind of form. I was just trying to keep all the form similar so that there is a consistency in design for the whole complex.

You mentioned the lift stops every third floor because it had something to do with efficiency. So, there were economical factors in this design?

Yes.

Did the housing authority require you to make this design?

No, I just came up with it. They gave us quite a bit of freedom. They didn't impose anything. They just gave us the size and the total number of units, then they gave us the site to work from.

Was Heinz Rust involved in this project?

Yes, he was the engineer.

You mention Heinz Rust on many occasions. This structure is very interesting and very clear with all these components—the flats, the staircase, the lift shaft and many other things—are related to each other very clearly. I think it's very impressive.

We worked very closely together with each other. When we were developing the planning, he got involved to make the structure as efficient as possible. I believe very strongly in trying to combine architecture and structure together.

What about the circular aspects that are in many of your projects? For example, the frames?

That's just a trick to make the blocks look different and trying to create openness to bring light into the corridor.

How do you feel about the Sui Wo Court project compared to other public housing projects you did?

Oh, I prefer Sui Wo Court. It's much more free with the design.

How many housing projects were you involved in within Hong Kong all these years?

I think just the two
(Sui Wo Court and Cho Yiu Chuen).

I wonder why such a big company as P&T would take part in public housing design, such as Sui Wo court. Today, they would not be involved in such projects.

Oh I think they would if they were asked. In Hong Kong you don't say "no". You're lucky to get a job.

There was also a private sector participation scheme by the housing authority. Is that why there were more private firms designing public housing?

Well, I think initially Housing Authority didn't have enough staff to design many of these large projects.

They said they only had 3 or 4 architects.

Yeah, haha.

There were other projects around that time but you designed this public housing Sui Wo Court. I guess there might be something to attract you to this project, apart from money?

I don't think it matters what kind of project or what client it is, it's the challenge of the project. You want to solve and create architecture so you take that challenge and you do it whether it's low cost housing or luxury apartments. Whatever it is doesn't matter.

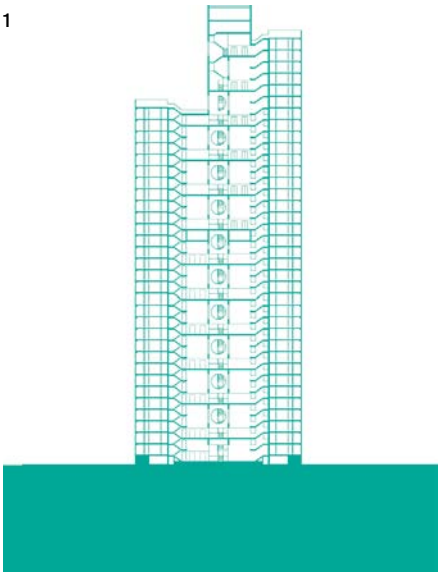
Chinese garden of Mr Kinoshita's home

Sui Wo Court

穗禾苑

Sui Wo Court was the first project of the Home Ownership Scheme. It was designed by James Kinoshita of Palmer & Turner (P & T). The jury stated that Sui Wo Court was proved to be the most successful project of the Home Ownership Scheme when it received the HKIA Award of 1981. And it was highly acclaimed by Ronald Poon, the former president of HKIA and peers of James Kinoshita, with the statement "the best design in recent years"[1].

1



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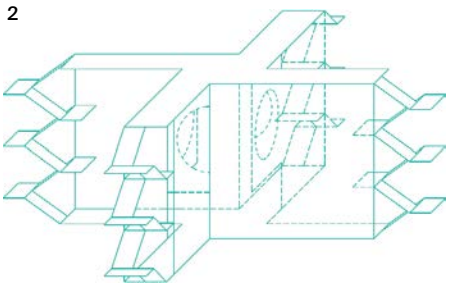
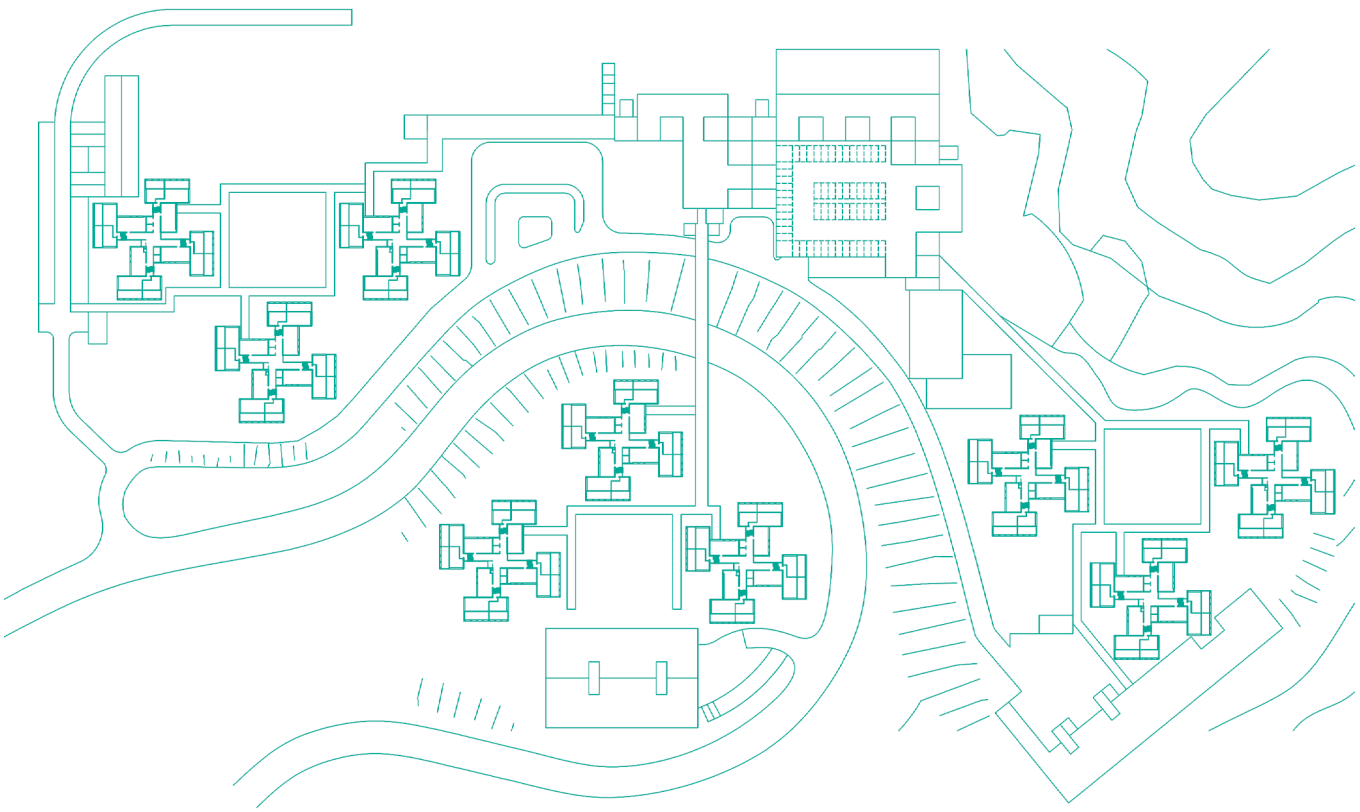


1 Section of the residential tower
2 Diagram of Circulation Pattern
3 Master plan of Sui Wo Court
1–3 from Han Man

3



The site is on a hill in Shatin district, overlooking the new town centre. How to place the building on the hill properly should be the first problem to be considered. Finally, nine towers were placed on three different levels of the hill in three groups; and each tower is formed as a combination of 9 blocks so as to easily suit the sloping site, which resulted in staggered roofs visually echoing the undulating hills. The three towers of each group form a U-shape in plan, creating a pleasant garden for communication and relaxation **Fig.1/2**, the intention of which was made clear by the architects: "we felt that it was important to strengthen the feeling of community spirit within the estate, so the design was focused on this concept"[2]. And each tower being a combination of smaller blocks at the same time makes itself look slimmer and taller in proportion, moreover, the heavy shadow cast on the body of the tower further strengthens this effect, which reminds one of the concave groves on the Doric Order.

A distinctive characteristic of the tower is the circulation design — the lifts stop on every three floor, and resident has to take lifts to the floor closest to his/her flat then go up or down by the staircase to reach home **Fig.3/5**. The circulation design was later adopted in three other public housing estates designed by P & T: Cho Yo Chuen, Hing Man Estate, and Clague Garden Estate. While the prototype could date back to the street deck in slab block type of housing. The earliest attempt could be the Healthy Village completed in 1956, which was the first low cost housing project (ten storeys high) where lifts had been installed[3]. The lifts stopped at every other two floors, where a wide corridor connect a cluster of staircases access to the flats. Sai Wan Estate, construct- ed almost in the same period, was supposed to be the second public housing which had been installed with lifts. The Builder said that: "eight lifts of a simple type will be installed, and these will have stops at every third floor; the intermediate floors will thus be only one floor's walk up or down."[4] However, there the circulation pattern is flipped, thus corridors are installed on every floor, accordingly the width of the corridors were narrowed down and the effect of street was diluted. Same situation occurred in Mark IV completed in 1964, which was the first resettlement estate where lift had been installed. The building was 13 to 20 storeys high with two sets of lifts — one stops on the middle floor and the other stops on the top floor. And the similar pattern to Healthy Village can be found in a series of police quarters built in the 1960s by the Public Works Department. Wong Tai Sin Police Quarters illustrates the type in point: "access to each flat is by staircase running the whole height of the building between each pair of flats, while wide promenades and bridges link up the flats at the fifth and ninth floors. The lifts stop only at

1 *Pan, Zuyao. Xian shi zhong de meng xiang: jian zhu shi Pan Zuyao de xin lu li cheng, 1968 – 1998.* Beijing: Zhongguo jian zhu gong ye chu ban she, 1999. p. 281.

2 Kinoshita, James. *From Slocan to Hong Kong: An Architect's Journey.* Trafford Pub., 2005. p.150.

3 *The Hong Kong & Far East Builder*, Vol.11, No.2, p.26.

4 *The Hong Kong & Far East Builder*, Vol.11, No.5, p.28.

4

5

4 Lift Lobby / Wang Ka
5 Spatial quality of the structure / Han Man

the promenade floors so that no tenant has to walk up or down more than two storeys. There is thus a distinct economy in lift installations and in the number of lifts needed since the proximity of staircases encourages their use.[5]" Police Quarters / Aberdeen, Police Quarters / Kennedy Town, Police Quarters / Tai Lam Chung, Police Quarters / Tanner Road, Police Quarters / Tin Kwong Road, and Police Quarters / Tonkin Street all followed the same pattern of circulation organisation. In the world-wide context, the history of "street in the sky" dates back as early as 1928 in the Narkomfin Building (1932) in Moscow by Moisei Ginzburg, where the streets are on the first and the fourth floor. The building is seen as the substantiation of the idea of "social condenser", which had inspired the Unite d'Habitation by Le Corbusier (1947—1952) then in Britain the Golden Lane City by Alison and Peter Smith-sons (1952), Park Hill by Jack lynn and Ivor Smith (1957—1961), and the Robin Hood Garden by Alison and Peter Smithsons (late 60s—1972). But such decks or streets in Hong Kong are different from the "streets in the sky" in western modernists', because it was not first intended to promote communal activities but acted as an economic solution to circulation instead.

In Sui Wo Court, naturally the circulation results in unusual spatial experience and three storey high lift lobby. And the architect's several responses indicate that he was trying to make best use of the opportunity and create interesting space: the lift shafts were set aside being together with two flats wings so that makes the central hall spacious, airy and bright; structure was artistically designed so that add more interest to the space **Fig. 6**. Of course such arrangement was driven principally by economic forces, but the final design has gone beyond the pragmatic requirement, in other words, the architect had succeeded in making what is not only economically efficient but also architecturally interesting and beautiful out of that. As the diagram **Fig. 7** illustrates, all the components—flats blocks, staircases, lift shafts, corridors, and the hall—are distributed within a rigid grid, interrelating with each other and bringing about clarity. Such clarity occurs in the facade expression as well—the structure of the building, posts and beams, is distinguished and constitutes the basic order of the facade, with the windows and the parapets being recessed and applied with dark colour, creating an impressive pattern **Fig. 8**.

All these things are well articulated and hard to be discussed separately, another example is that: the flats in every two adjoining blocks are on different levels because of the nine smaller blocks of each tower sitting on different levels of the slope (as mentioned above), while the height differentiation is designed to match the height of one stair flight so that the doors can be well received by the stair landings upon the two sides.

5 *Far East Architect & Builder*, December, 1967, p.41.

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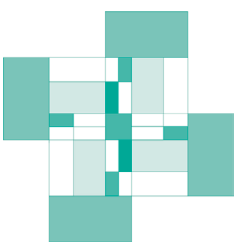

6 Sui Wo Court-Perspective / P&T Architects & Engineers Ltd.
7 Diagram of plan / Han Man
8 Sui Wo Court-Elevation / Wan Ka

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Choi Hung Estate

彩虹邨

Choi Hung Estate (1962—1964) was designed by P & T, the private architectural firm who had designed most public housing projects in Hong Kong—P & T had designed 6 public housing estates for Housing Authority and Housing Society in total, four of which won the HKIA Annual Awards. The architects in charge of Choi Hung Estate were Ian Campbell and Dick N. Pang. Architect J. A. Prescott once gave high praise to the estate: "Choi Hung Estate is a massive achievement in all senses of the word",[1] and it is the master layout that was particularly stressed: "It has provided for many thousands of people accommodation with good light, air and space relationships between the various blocks. It is structurally sound economic building, but it is more; in its layout it is sensitive, 'it touched the heart strings' and transcending more function becomes architecture."[2]

The Estate consists of eight slab blocks of 20 storeys each plus a series of connected lower buildings of seven storeys. Provided that all these blocks were designed to be the same number of storeys, they would all need lifts to be installed, but currently, only the 20-storey-slabs are installed with lifts, so in that way the lifts have been made best use of. And its benefits are more than that: the eight 20-storey-blocks were placed on the periphery and formed two large courts primarily, the lower blocks and the other buildings—two secondary and three primary schools, a post office, and ancillary buildings for community—were distributed within the courts, provision was also made for shops on the ground floors of these lower buildings, and other portions of the ground floor were left open for visual effect[3]; consequently, not only all buildings have good natural lighting and ventilation, but also the enclosure formed by the high blocks and the diversity added by the low blocks created strong sense of a community.

Another notable feature of the "Rainbow" Estate's design is the play area in the tall blocks: considering it is inconvenient for the residents living in the higher parts to enjoy the public space, the architects had designed and provided two play areas for every floor above the 7th floor in the high block, which, with particular expression, are legible on the elevation.

1 Prescott, J. A. 1964. "Building, but little architecture." *South China Morning Post*, Hong Kong, May 29, 1964.
2 Ibid.
3 *The Hong Kong and Far East Builder*, Vol.16, No.1, p.36.

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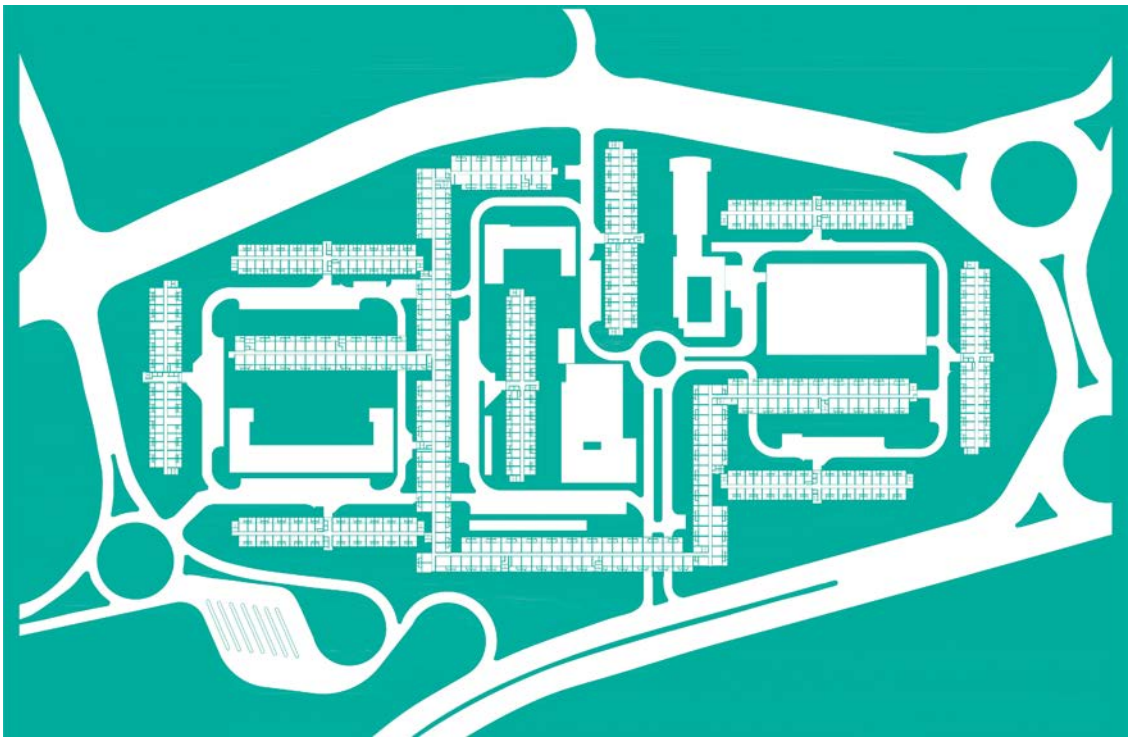

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1 Partial elevation showing the playing area / Gu Daqing
2 Master plan and composite section / Gu Daqing, Vito Bertin, Zhu Jingxiang
3 Typical elevation, plan and section of high block / Gu Daqing, Vito Bertin, Zhu Jingxiang

North Point Estate 北角邨

North Point Estate was the first project of Low Cost Housing Scheme — to provide self-contained flats suitable for the lower income groups of white-collar workers, a scheme managed by Housing Authority.

The estate was located at Java Road, and the total area of the site is 293,570 square feet. It was subdivided by Shu Kuk Street and Kam Hong Street into three parts — West Estate, Central Estate and East Estate. West Estate consists of a U-shaped perimeter block and three tower blocks connected by single storeyed blocks along the northern boundary overlooking the harbour. Central Estate consists of one long building. East Estate consists of a U-shaped perimeter block and three tower blocks in the centre of the "U". Shops, post office, school, school health clinic, assembly hall, out-patients clinic, estate office, workshop and store were all incorporated on the ground floor.

The architect is Eric Cumine, a prominent figure in the history of Hong Kong architecture. The most notable feature of the design has been well elucidated by *The Hong Kong and Far East Builder*: "the ingenious solution arrived at by the architect is misleading by its apparent simplicity — flats on either side of the balcony are staggered so as to allow all the rooms to be provided with windows and to provide excellent cross-ventilation in the individual flats. The reinforced concrete frame, however, has been so designed as to extend the gross width of the buildings. A further advantage of this design is that it allows for much more pleasing elevations to the buildings, which would otherwise present extensive flat and uninteresting masses."[1] There are four main types of flats, but the architect created many variations — subtypes — responding to specific situations.

It was built from 1955 to 1957 and was cleared in 2002 and demolished in 2003.

1 *The Hong Kong & Far East Builder*, Vol. 11, No. 2, p.17.

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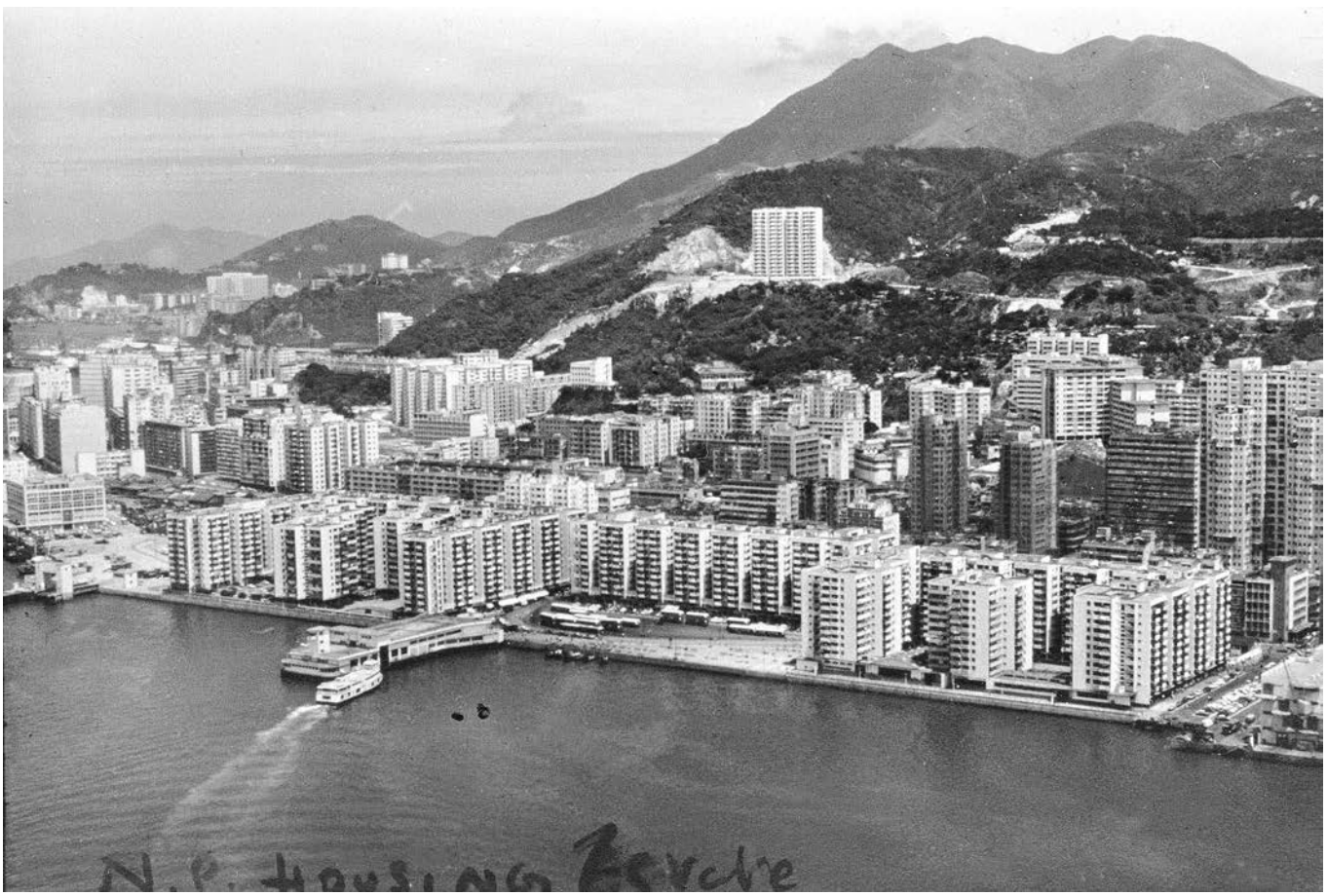

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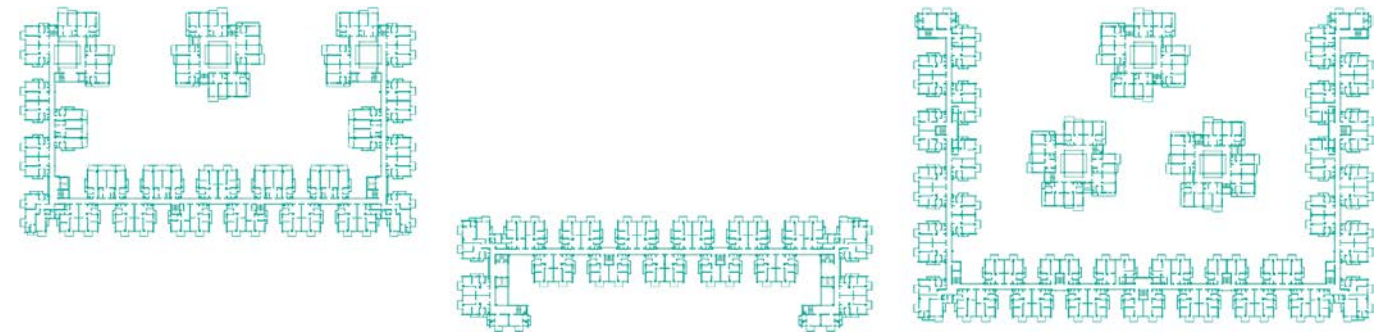

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1 Aerial view of North Point Estate Hong Kong Government Photo Library
2 Typical plan / Gu Daqing, Vito Bertin
3 North Elevation / Gu Daqing, Vito Bertin
4 Site plan / Gu Daqing, Vito Bertin
5 View from the West Estate to Central Estate and East Estate Hong Kong Annual Report, 1981
6 Close view of the balconies Woo Pui Leng

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So Uk Estate

蘇屋邨

So Uk Estate was the third project of Low Cost Housing Scheme. It was built to a master plan produced by Eric Cumine. Four private architects — Leigh and Orange, Luk Him Sau, Szeto Wai, and Chau & Lee — were appointed to do the designing and detailing work, working as a consortium chaired by Cumine. This was probably the sole public housing estate in Hong Kong which was designed in such manner; design by more than one architect might have facilitated the diversity of block types and flat types, at the same time, the coordinator ensured the integration of the estate as a whole.

So Uk Estate was the largest domestic housing development that had ever been carried out as an integrated scheme in the Far East by then[1]. The nineteen acre site slopes from south to north and was formed into several levels of terraces on which were placed the four variant block types designed by the four architects respectively.

It was built from 1957 to 1963. After approximately 50 years service, it was demolished and now the site is under redevelopment.

1 *The Hong Kong & Far East Builder*, Vol.13, No.1, p.6.

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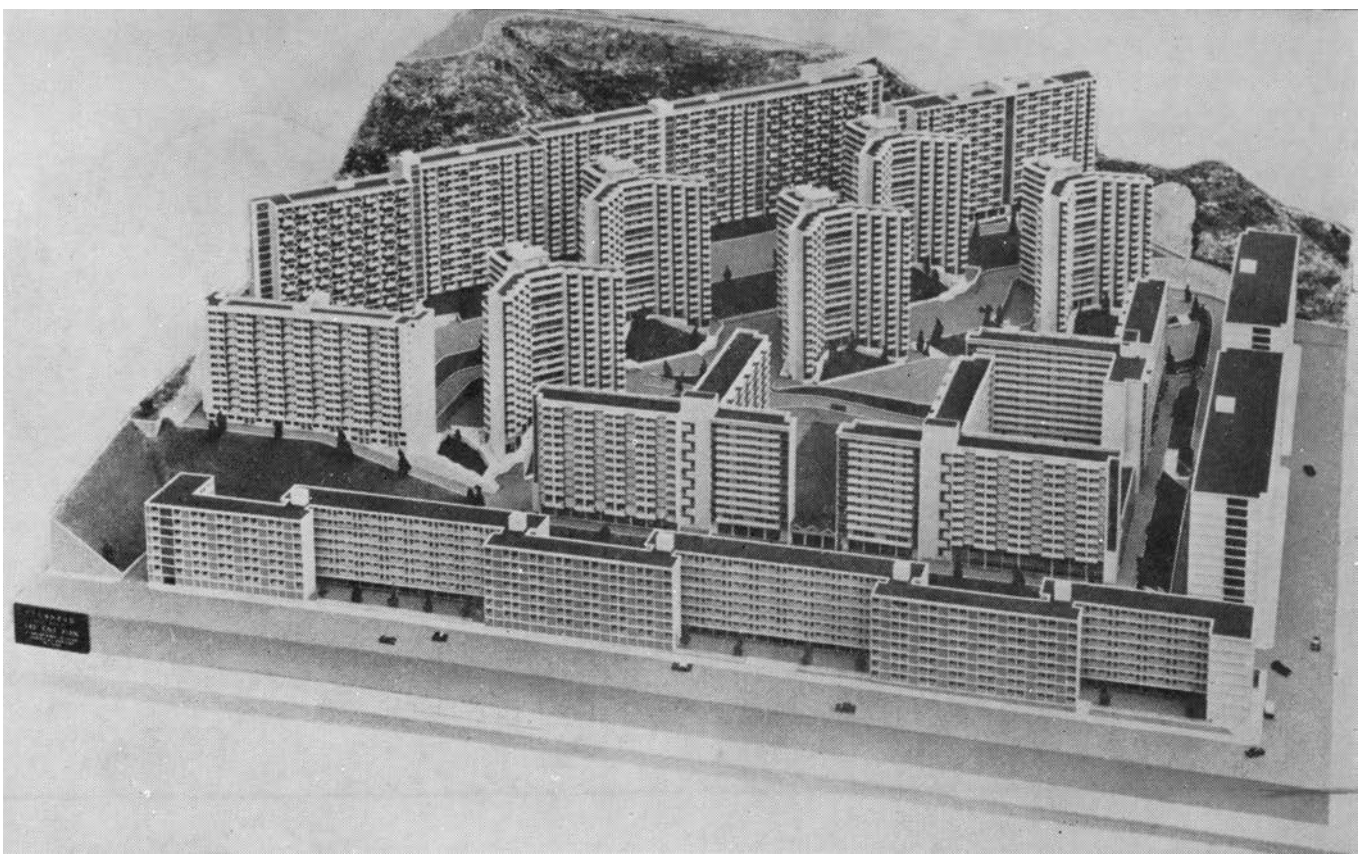

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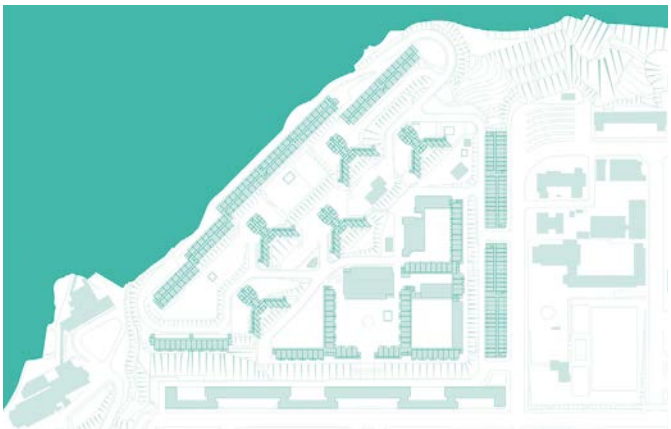

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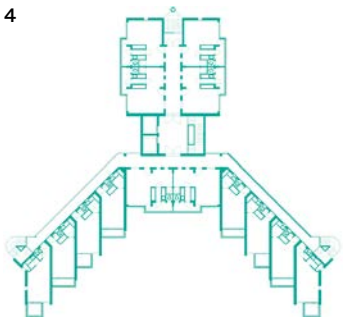

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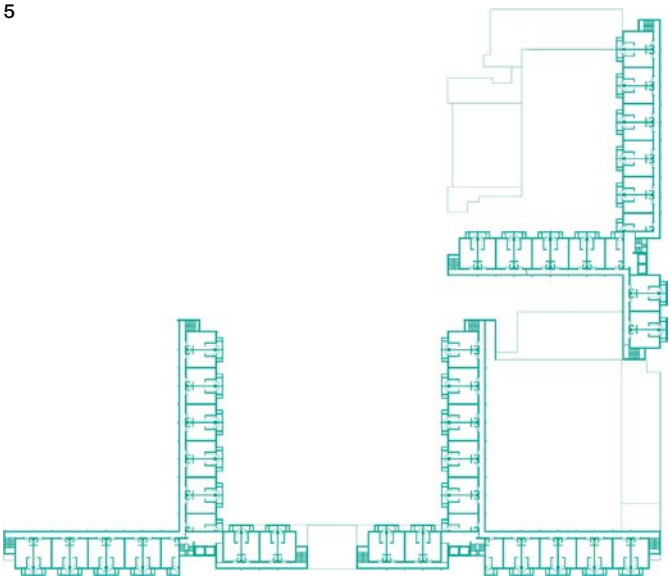

1 Aerial view of model / Hong Kong Government Library
2 Site plan
3 Composite Section
4 Typical plan designed by Szeto Wai
5 Typical plan designed by Luk Him Sau
6 Typical plan designed by Chau & Lee
7 Typical plan designed by Leigh & Orange
2–7 Gu Daqing, Vito Bertin, Zhu Jingxiang

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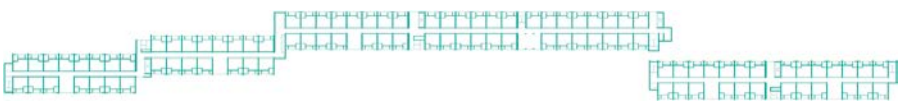

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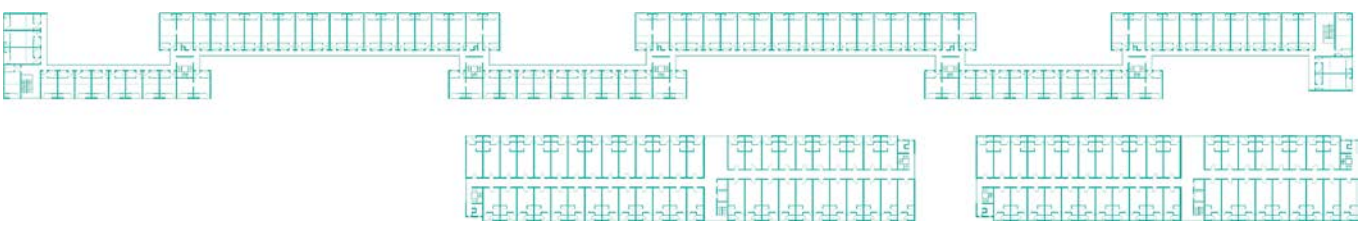

Gu Daqing 顧大慶

Affordability as the Inspiration of Design for Public Housing

經濟適用原則：香港現代公共住宅的設計理念

A Brief Description of the Design Characteristics of Hong Kong Early Public Housing[1]

Having been teaching architectural design at The Chinese University of Hong Kong for so many years, we have made a conscious effort to discern exemplary built works which can serve as local references for studio teaching. With the support of government research grants, we have conducted a long-term investigation of Hong Kong modern architecture.[2] Unlike other studies on the same subject, which are mainly interested in historical facts, our study focuses on the design characteristics of Hong Kong modern architecture, using the method of case study. Among all the cases we have documented and studied, the majority are public housing estates. Reflecting on Hong Kong's public housing development in the past 60 years, the period between the 1950s and the 1970s is the most exciting in terms of design achievements. What interest us in design studies are such basic design issues such as the building's relation to land, the formation of living units, the organisation of circulation, and the method of construction, etc. Confronted with extreme conditions, architects at that time demonstrated a high level of design ingenuity to come up with design solutions which are not only practical and economical but also formally and spatially interesting. In this short text, I am going to give a brief description of the design characteristics of Hong Kong early public housing in three aspects: land strategy, unit formation, and the organisation of building circulation, followed by reflective discussions.

I. Built on hilly sites: terraced land, steep slopes, and mountaintops

Many early public housing estates were built on those sites, which were normally considered not ideal for commercial development, such as terraced land, steep slopes, and mountaintops. Several public housing estates demonstrate unique characteristics because of their site strategies. Of the three types we have identified, one example for each type is given here.

So Uk Estate (1960—63) in Cheung Sha Wan is a landmark estate built on a terraced land. **Fig. 1, 2** The master plan was designed by Mr. Eric Cumine and the buildings were designed by four private architectural firms. The site is in a triangular shape and at the foot of a mountain, topographically

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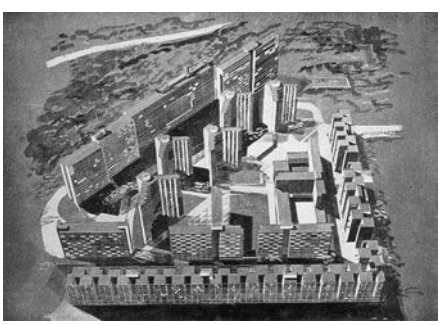

1 An early version of the article, "Affordability as the Inspiration of Design for Public Housing—A preliminary study on the design characteristics of early public housing in Hong Kong" was published in *Time+Architecture*, issue 4, 2011, p50—54. It has been condensed and revised by the author for this publication purpose.

2 The research has been supported by two grants from the Research Grant Council of the Hong Kong Special Administrative Region, China (4668/06H and 444610). The main research collaborators: Vito Bertin, Zhu Jingxiang, and Woo Puileng.

high on the northwest side and low on the southeast side. Mr. Cumine arranged long and linear housing blocks on the edges of the site to form the boundary. Leigh and Orange's three blocks define the south and east boundaries, meanwhile, Chau and Lee's four linear blocks define the northwest boundary. Within the site boundary, Mr. H.S. Luke's slab buildings form several enclosed and semi-enclosed courtyards; Mr. W. Szeto's Y-shaped towers spread out

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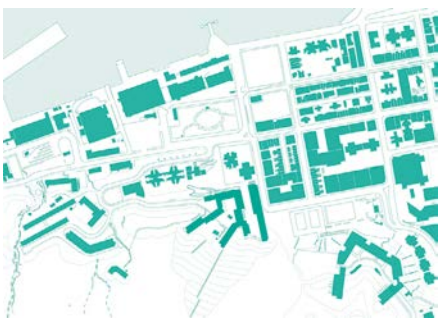

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on the slope to define the middle zone. All these buildings are built on four terraces, contributing to very rich spatial experiences for walking and driving, and altogether creating an impressive entity.

Sai Wan Estate (1958), designed by Mr. T.S.C. Feltham in Kennedy Town, is an epitome of the cross-contour strategy applied on steep lands. **Fig. 3/4** The site is almost rectangular in shape, comprising the hillside situated just to the west of Cadogan Street. The gradients of the site are extremely steep with the lowest point at about 15 metres above the street level in the northeast corner and the highest point at 87 metres in the southwest corner, resulting in a difference in level of 72 metres. The five slab-type housing blocks are placed on the site like five stretched fingers in a cross-contour position. The rationale behind it is twofold. On the one hand, it reduces a significant amount of work on retaining walls. On the other hand, it allows residents to access the building from different levels without needing to use a lift. In theory, every floor is the ground floor.

Hing Wah Estate II (1976) in Chai Wan is an example of the mountain-top estate. **Fig. 5/6** It is built on the top of a hill more than 40 metres above the ground. The site comprises two high slab blocks standing on the top of the hill and a group of low slab blocks which form the boundary of the site. Two low blocks, each attached to a lift tower, are placed in a cross-contour position, connecting the site with the city below. Residents may take one of the lifts from the foot of the hill to the middle of the block then walk along an overhung street (the "street-in-the-air") to arrive at the top of the hill where the centre of the estate is located. Residents can also take the lift to the top of the block then walk on the rooftop terrace to arrive at one of the tall blocks. The floor height and façade composition of the floor of the tall block that is connected to the rooftop of the low block, are treated differently from the other floors, giving an indication of a shopping street in the air. So much so, the lift tower, the "street-in-the-air", and

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rooftop terrace form a complex circulation system uniting different blocks into one whole.

II. Open living and one-room flat

Completed in 1951, the Police Married Quarters (PMQ) on Hollywood Road is the first building in an ambitious plan initiated by the Colonial Government for lower-ranking policemen.[3] From 1951 to 1967 with the opening of Wong Tai Sin PMQ, the Government built a total of 5297 units for married police families. As a reference, the number of married policemen at that time was 5345. Although this collective housing plan was for a specific target group, we can still consider it the pioneer of Hong Kong public housing since it started a few years earlier than the Shek Kip Mei fire in 1953.

The two unique characteristics of the floor layout of the Hollywood Road PMQ are a central public corridor separating the kitchen from the one-room flat and a large verandah between two kitchens. **Fig. 7/8** The shared semipublic verandah may suggest a strong social concept in the mind of the architect. However, it actually has a lot to do with Hong Kong's subtropical climate. We could see in some Hong Kong old photographs that the verandah above the arcade functions as the main living space such as drying cloths. For the second PMQ on Canton Road, in 1953, a major revision was made in the floor layout to remove the verandah to the other side of the one-room flat, while the public corridor remains on the other side. Now, the verandah becomes a pure internal open living space. This combination of a verandah attached to a one-room flat becomes the prototype of living units for Hong Kong public housing in the early years. The rectangular one-room flat provides flexibility for subdivision and the verandah, often connected with the kitchen and toilet, is certainly the main space for daily activities. The importance of the ve-

3 For detailed discussion on the design of the verandah type of married police quarters, please refer to "Types and Variations—A study on the design of Hong Kong's old police housing (part 1)", Gu Daqing and Vito Bertin, *Time+Architecture*, issue 2, 2016, p146—153

randah in terms of lifestyle is best demonstrated in the floor plan of Choi Hung Estate by Palmer & Turner Architects & Engineers Limited, in which the verandah of the small unit has the same depth as the main room.

Taking this prototype as the subject of study and observing the evolution of the building types by the Housing Authority, we could identify a clear line of transformation from the one-room flat to the partitioned flat and from open living to the disappear-

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ance of verandah as an essential component. **Fig. 9** Mark I, the very first building type, is by all standards an extreme case, with each family occupying only a little rectangular room. Starting from Mark III, a verandah

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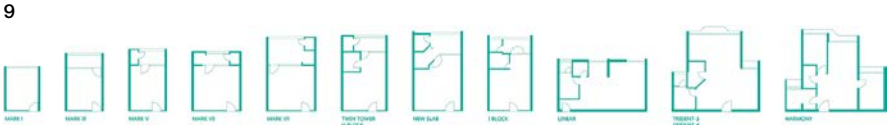

was added to the room but without kitchen and toilet. The toilet was added to the verandah in Mark V and both kitchen and toilet were added to the verandah in Mark VII. Following it, many variations were made to explore the interrelationship between the verandah, kitchen, toilet and main room. By the time of New Slab, a new tendency appeared and the verandah was reduced to a little balcony purely for the purpose of kitchen and toilet ventilation. The main room now had a direct opening facing out, which was previously blocked by the verandah. With the disappearance of the verandah, daily activities previously done in open air were now moved into air-conditioned interior space. This change also led to the reconfiguration of one-room flat from a single rectangular shape to a more complicated combination of shapes. This reflects the change of lifestyle in people's daily lives.

III. The way back home: street-in-the-air and sky lobby

Photographer Michael Wolf's striking images of the elevation of Hong Kong public housing shows an extremely monotonous organisation with thousands of living units repetitively packed horizontally and vertically. However, we could find several early examples of different strategies that dealt with the circulation of housing blocks, making the journey back home more interesting. Both the street-in-the-air and the sky lobby are strategies to achieve efficient circulation in an economic manner, while giving a special character to the expression of the building in high-rise slab blocks and tower blocks.

The street-in-the-air type was originally conceived by Le Corbusier in the 1920s and adopted by Alison and Peter Smithson in the Golden Lane housing project in London in 1952 and further applied by Ivor Smith in Sheffield and Jack Lynn in the Park Hill project from 1953 — 57. The earliest built example of the street-in-the-air in Hong Kong is the Police Married Quarters in Cheung Sha Wan (1960)by PWD.[4] **Fig. 10 / 11** In England, the adoption of the street-in-the-air strategy was strongly driven by social ideas.But in Hong Kong, this was purely a pragmatic solution to solve the vertical circulation problem in high-rise buildings. The PMQ in Cheung Sha Wan can be simply understood as a four-

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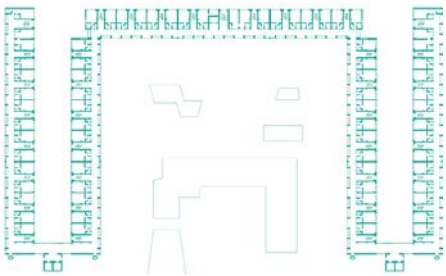

storey slab building (plus a roof terrace) stacked on top of another seven-storey slab building. The ground floor of the four-storey slab building becomes the street in the air. There are only two groups of lift installed along the 320 metres long horizontal circulation.The residents can first take the lift to the 7th floor and then walk up or down to each flat via the staircase. The first example of the street-in-the-air strategy applied in public housing is the phase three of Healthy Village at North Point by Feltham in 1965. **Fig. 12 / 13** for Housing Society. This concept can also be found in Housing Authority's projects. The aforementioned Hing Wah Estate II (1976) and Kwai Shing Estate (1970s) are two examples of the street-in-the-air strategy applied at mountaintop sites. Housing Society's Kwun Lung Lau (1960s) by Szeto Wai is the earliest example of the sky lobby strategy. **Fig. 14 / 15**

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4 For detailed discussion on the design of the street-in-the-air type of married police quarters, please refer to "Types and Variations — A study on the design of Hong Kong's old police housing (part 2)", Gu Daqing and Vito Bertin, *Time+Architecture*, issue 3, 2016, p126 — 134

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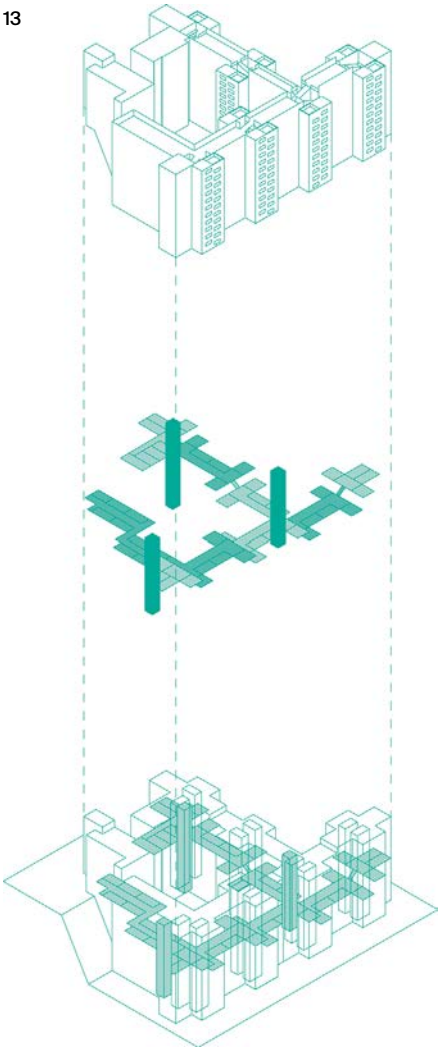

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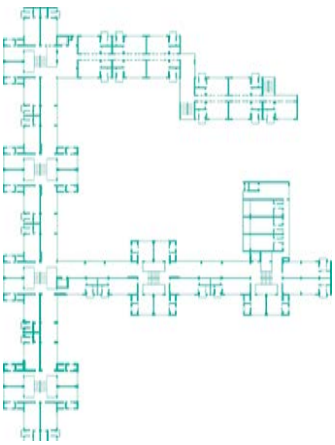

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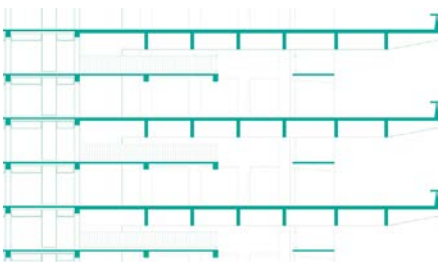

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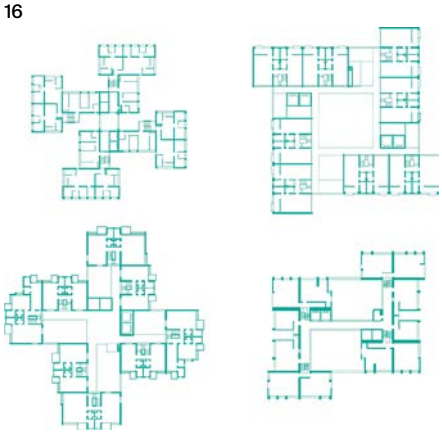

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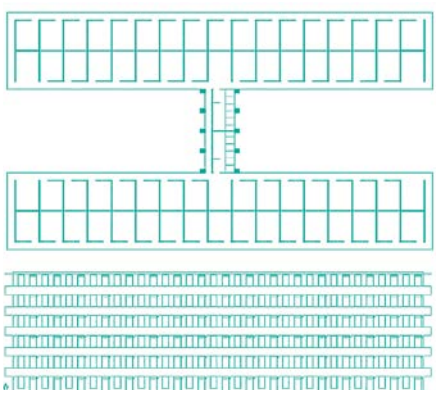

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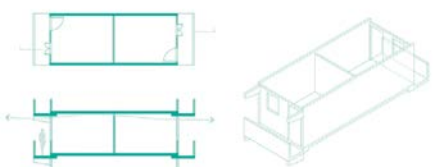


1 So Uk Estate, master plan,
2 So Uk Estate, visual representation, The Hong Kong and Far East Builder, vol. 13, issue 5, 1957, p.5
3 Sai Wan Estate, master plan
4 Sai Wan Estate, model photo, The Hong Kong and Far East Builder, vol. 11, issue 1, 1955, p.27
5 Hing Wah Estate phase II, master plan
6 Hing Wah Estate phase II, view from street
7 Hollywood Road Police Married Quarters, basic drawing information
8 Hollywood Road Police Married Quarters, view from corridor
9 The evolution of unit plans of types from Housing Authority
10 Cheung Sha Wan Police Married Quarters, floor plan
11 Cheung Sha Wan Police Married Quarters, view of outside
12 Kwun Lung Lau, floor plan
13 Healthy Village, diagram of circulation system
14 Healthy Village, street level floor plan
15 Kwun Lung Lau, section of sky lobby
16 Four towers of sky lobby type from Palmer & Turner, up left: Sui Wo Court (1980), up right: Cho Yiu Chuen (1981), low left: Hing Man Estate (1982), and low right: Clague Garden Estate (1988)
17 Mark I, building, plan and elevation
18 Mark I, unit plan, section, and axonometric diagram

Credit
1, 3, 5—18 from the author

Due to specific site constraints, all the six slab blocks share one vertical circulation tower, which connects the estate to the city. Every two floors share one expanded lift lobby, which becomes the public space. The most exciting examples of the sky lobby strategy are four housing estates by Palmer & Turner: Shui Wo Court (1980), Cho Yiu Chuen (1981), Hing Man Estate (1982), and Clague Garden Estate (1988). **Fig.16** Mr. James Kinoshita is the architect for the first estate, Sui Wo Court. The whole complex is composed of nine residential towers, three form a group and are placed on three different levels. The residential tower is composed of eight vertical towers in four pairs. Two form a "T" shape and four "T"s are organised in a windmill pattern.
This creates an exaggerated tall and upward expression. The section shows that every three floors share one lift lobby. As the two towers of "T" have a half-floor difference in level, the residents only need to walk up or down half-floor to reach another level. The other three estates after Sui Wo Court demonstrate the same concept of sky lobby but each has a very different character in terms of plan composition, volumetric organization, and facade expression. These four projects prove that the same organisational idea or type can render many different possibilities.

IV. Conclusions

To summarise, I have tried to capture the main design characteristics of Hong Kong public housing in three aspects: site, unit, and building. As said in the very beginning, this is a design study—addressing basic design issues—without touching on other important aspects of public housing such as social, political, and economical issues. The intention is to highlight one particular issue in each aspect. It will need much more work to present the whole picture of the design achievements of Hong Kong public housing. However, the presented material should be enough to let us draw some preliminary conclusions. First, those architectural examples described above demonstrate unique design solutions developed by Hong Kong architects at that time to respond to extreme conditions being confronted. The cross-contour strategy applied at hilly sites is a solution to reduce the cost for constructing retaining walls at the same time by creating several "ground floors" for high-rise housing blocks. The one-room unit attached to an open verandah is deeply rooted in Hong Kong's traditional "Arcade" building type and is also an extreme solution to Hong Kong's economic and social conditions at that time. The "street-in-the-air" concept that originated from the European architectural culture was adopted by Hong Kong architects as the most economical way to solve the vertical circulation problem in high-rise housing blocks. These unique design solutions have given Hong Kong's public housing unique characteristics.

Second, the living standard that Hong Kong architects worked with at that time was extremely low from today's point of view. For instance, the standard unit size of Mark I is 11.15 m^2 for 5 persons and 2.23 m^2 per person. But we cannot say that the design quality of public housing was low too. In fact, the quality of design is independent of living quality or other related issues such as constraints in finance and construction technology. The standard floor plan of Mark I is H-shaped so that two parallel housing blocks are connected by a service block. **Fig.17/18** The floor plan of the two long arms consists of two rows of rectangular units, back-to-back and surrounded by a cantilevered balcony. One would assume that the cantilevered balcony in such a highly symmetrical and monotonous plan should be constructed using only one method. However, the architect actually employed different treatments with one side being a pure cantilevered slab and another side having additional support from cantilevered beams underneath. The reason is that the architect had already considered the possibility of conversion from single-room units to self-contained flats in later times. The position of cantilevered beams is for supporting the partition wall on one side of the corridor. Although the Mark I type as an emergent solution was designed within a very short space of time, it involved long-term considerations. I have tried to prove in this short text that the achievements of Hong Kong's early architects demonstrate a high level of design which was among the best in the world at that time.

Third, we have learned a lot about design from visiting, documenting, and analysing public housing estates. In this respect, Hong Kong early public housing has served as a rich resource for architectural education. Again, what we have learned from these studies is not really "housing design" as a special building type but design principles and ingenuities in general, gleaned from how architects at that time dealt with the issue of land, use, structure and construction. Over the years, we have been fortunate to be able to study some of the most outstanding public housing estates. However, a lot more can be done in the future. In reviewing these studies, we have realised that most of these interesting designs were produced from the 1950s to the 1970s, and a few in the 1980s. Taking the evolution of Housing Authority's building types as a reference, the most active exploration of various types happened from the 1950s to the 1970s. Then the exploration gradually narrowed down to a few types with few modifications. Different housing types help to create a rich urban fabric and a variety of urban spaces, while a few types result in a monotonous urban fabric and urban space. In recent years, it seems that public housing has been driven mainly by social, political and technological forces and the matter of design has been totally left aside. This tendency becomes apparent if we make a comparison between Hong Kong and other countries of similar conditions such as Singapore.

Contemporary
當代

Taikoo Shing Wong Tung & Partners

Mei Foo Sun Chuen Wong Tung & Partners

Heng Fa Chuen Simon Kwan & Associates

Hollywood Terrace Rocco Design


ONE
ELEVEN

Pak Tin Estate, Shek Kip Mei Estate

Hong Kong Housing Authority

Shui Chuen O Estate Hong Kong Housing Authority

Home for All

給所有人的家

Hong Kong Housing Authority's mandate is to provide public housing programme which meets the housing needs of low-income families that cannot afford private accommodation.

Interviewers:
Weijen Wang
Thomas Chung
Thomas Tsang

Text:
Rebecca Lo

The fundamental human need for housing has topped the Hong Kong government's policy agenda for well over six decades. While it may be argued that Le Corbusier provided an idealised master scheme through his Unité d'Habitation tower blocks post World War II, it can be further argued that Hong Kong's architects have refined the late French architect's concepts for contemporary living. Providing homes for more than two million people or approximately 30 percent of the city's population, Hong Kong Housing Authority (HA) is the city's biggest developer and landlord, and it seeks to continue its reputation as benevolent with gradual improvements to its properties. It has been an ongoing process with hits and misses: as Hong Kong's living habits evolve, HA's architects need to consistently think creatively to meet the city's ever changing demands.

HA was born out of the ashes of the Christmas day 1953 fire in Shek Kip Mei's six villages that resulted in 53,000 people being left homeless overnight — predominantly, these were recent immigrants that escaped mainland China. Governor Alexander Grantham initiated a resettlement programme that became the first generation of public housing blocks. 6-storyed Mark I which later turned into seven storeys high slab block residences, with external corridors, shared toilets and one room units with a minimum size of 120 ft^2. In 1967, the second generation of public housing was ushered into the city with Wah Fu, a milestone development designed by Dr. Donald Liao, HA's former director. "Wah Fu was a landmark," notes Dr. Rosman Wai, Vice-president of HKIA. "Not only in terms of design, but in the way it fostered a sense of community. Wah Fu, influenced by the new town concept, has inspired designs of private residences such as Mei Foo and Taikoo Shing."

In 1978, the third generation of public housing saw one room flats grow into units with multiple rooms for different functions. It was also the year that HA began its Home Ownership Scheme. The fourth generation can be categorised as Harmony Blocks with cruciform plans; central core of lifts, scissor staircases and other services; and 20 units per floor. "The Harmony Block was designed for pre-fabriation and pre-casting construction," explains Wai.

From 2000 onwards, HA has adopted a site-specific programme. "There are no more standard blocks," says Wai. "Everything has opened up. Block designs vary. We have typical units as the base, and architects make

HA Public Rental Housing Development at Anderson Road, Kwun Tong / Photo Credit: Hong Kong Housing Authority

Pak Tin Estate and Shek Kip Mei Estate, Shek Kip Mei
Photo Credit: Eagle Wu

up blocks according to the site's environment, such as wind conditions, sun path, sea views and other factors. Depending on the site, some sit on the ground directly without a podium and have a separate car park block. It's the best distilled from the third and fourth generation of public housing. While repetition is necessary for prefabrication to be possible, it allows us to prefab entire rooms such as kitchens and bathrooms off-site. Approximately half of our design is done in-house."

Yet it may be concluded that as public housing towers grow taller and need to accommodate the kind of numbers typically found in an American or European town, something has to give. Is comfort being sacrificed for the sake of slotting people into the air? For example, the generous public corridors where social activities occurred in a spontaneous manner have virtually disappeared, replaced by higher spatial efficiencies and shorter passageways. An increased number of people are sharing the outdoor spaces. Access to light and air, a critical measure of livability, is curtailed by the lack of private balconies in the later public housing estates. With 4 years the average wait to get into public housing, are standards being sacrificed for the sake of satisfying public demands?

"Since Wah Fu, we have paid attention to public spaces," elaborates Wai. "A robust public arena encourages activities. It is where NGOs and estate managers can organise public events such as carnivals or educate the public on issues such as fire safety. It is an arena for public discussion. In the 1990s, there was a trend towards inward looking gated communities such as Tin Shui Wai. The result was a lack of street life. The lessons learned from Tin Shui Wai taught us that a community needs a vibrant street life. We now encourage more shopping at the street level, as well as access to active and passive landscapes. Our policy is to allow at least 1 m^2 of exterior space per person. For every 15 flats, we plant a tree. Shui Chuen O and Anderson Road are recent good examples where we used micro climate studies to make the best use of the natural conditions of the sites."

Since 2002, HA has adopted a universal design policy for all of its estates. Along with ensuring that bathrooms and kitchens can accommodate wheelchair access, sockets are positioned at 1.2 m high and door knobs are replaced by lever pulls, for more people to use them with greater ease. "It is about accessibility and comfort for everyone," says Wai. "Older estates have been upgraded with barrier free access. We have spent more time and effort on this aspect of housing than many private developers. Universal design is part of being socially sustainable. It is a basic design standard."

Wai believes there is a somewhat nostalgic view amongst both architects and the general public towards the golden age of public housing — a fostering of community spirit that provided the catalyst for public heroes such as Sam Hui and Li Ka Shing to rise and shine. "Living habits are different now," Wai argues. "No one like sitting on chairs in common corridors to chat with neighbours anymore. It may be romantic to imagine Sam Hui playing guitar in the lift lobby, but the reality is that if someone makes noises in the common areas, the estate management office will receive complaints. People may be nostalgic for seven storey resettlement blocks, but corridor balconies don't work anymore. As for private balconies, we found that people were closing them off to enlarge their interior living space. The balcony has to be incorporated into their flat area. If they have a bigger flat, it means a higher rent. The World Health Organisation recommends a housing allocation of 7 m^2 per person, and we abide by this standard, and are now providing about 13.1 m^2 per person. Since 1999s, we no longer include balconies in our schemes, and our tenants have welcomed this move."

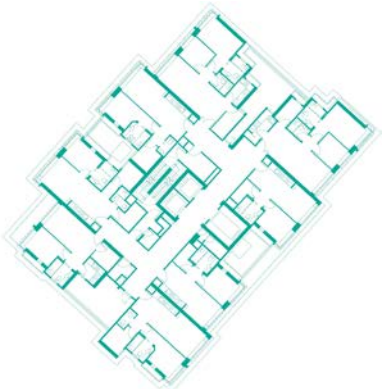
Going forward, Wai acknowledges HA has to think outside the box to not onlyaccommodate the current needs of Hong Kong, but also to prevent abuse of the public housing system. "Young people queue up for public housing as soon as they graduate from university, when they still qualify as they don't make much money yet," she admits. "They see no other choices ahead. This results in a housing gap. We need to think of ways to build housing that suit this transitional group of young people, to suit their living and housing habits, rather than build strictly for nuclear family typologies. One size does not necessarily fit all."

The Home Ownership Scheme, which was on hold from 2003 until 2014, allows people in public housing to buy into the dream of owning a property at a price that is more reasonable than market rate. Currently approximately 40 percent of all HA developments are built for purchase, and the developments have more in common with private housing than public ones. Plans are typically cruciform shaped with eight units per floor, reduced corridors and cross ventilation in lift lobbies. "When HA saw that many immigrants from mainland China were here in Hong Kong to stay, we began the scheme to allow people to move up the housing ladder after they have lived in public housing for awhile," explains Wai. "It is important for people to have their own home. Having roots makes for a more consolidated society that will contribute more to the city. It is important for a society to have hope. Our housing ladder gives people hope."

The Tanner Hill

丹拿山

Location	North Point, Hong Kong
Client	Hong Kong Housing Society
Year	2015



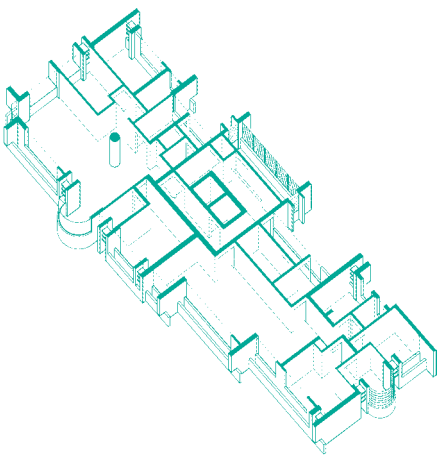
To address the urgent demand for elderly facilities in East Hong Kong Island, the development provides a variety of elderly health care and amenity facilities within a four-level podium at Tanner Hill, North Point. Immediately above the podium are three residential towers, specifically designed to cater for the needs of elderly residents. Universal accessibility and environmental design are two important design principles of the project. The site was previously designed for sandwich-class housing, with its foundation completed in 2003, posing a unique and significant challenge for the design of the new development in order to minimize any need for demolition or modification. Feasibility studies also had to be carried out to investigate the possibility of creating direct connections from the development to the MTR's North Point station.

Tao Ho Design

6A Bowen Road

6A 寶雲道

Location	Midlevels, Hong Kong
Client	Hsin Chong Properties Ltd.
Year	1986
Awards	1986 HKIA Silver Medal



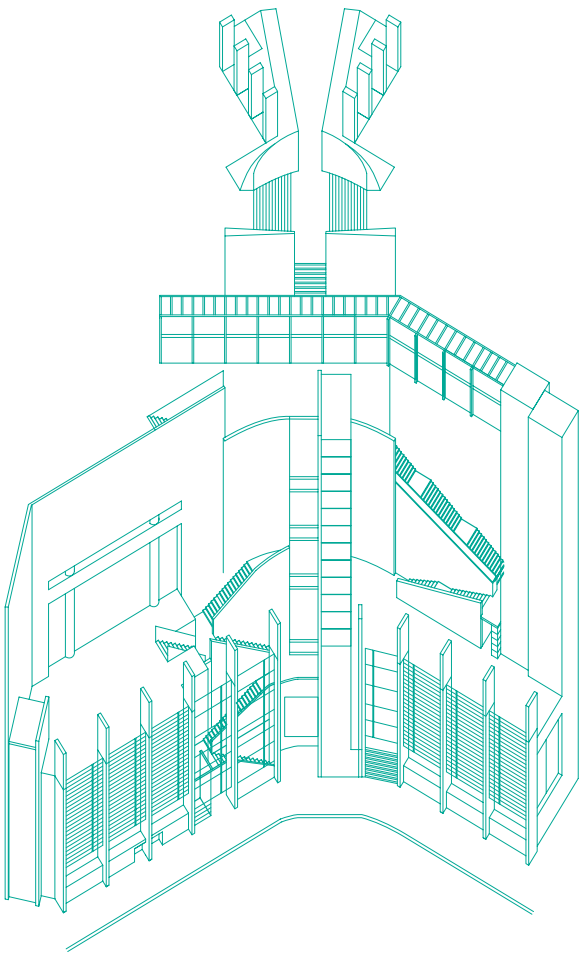
Midlevels is the district on Hong Kong Island that comprises the foothills above Central, which lay in the shadow of Victoria Peak. It is an amazing feat in terms of urban design: a labryrinth of tiny, curving, hilly streets lined with skyscrapers that seem to precariously defy the laws of engineering and physics, giving the neighbourhood a dizzying feel, while simultaneously providing a warmly intimate and human scale at ground level. The terrain is so steep that outdoor escalators have been installed in some places. It was in this milieu, on a small site on Bowen Road in Eastern Mid-levels, this project attempts to create a new urban living environment; a high rise building of flats that have all the conveniences of an individual house, such as a garden, rooms with generous views and space, and multiple floors within each unit. There are a total of 21 units with six different types varying from 165 square metres to 300 square metres per unit. The building is rich in exterior detail — details that are intentionally asymmetrical — mimicking the complex and incongruous geometric fabric of its surroundings. The buildings facades have Bauhaus allusions in the bold lines that bring a sense of order and a systematic grid to its various architectural and sculptural elements.

The design attempts to create a dynamic architectural form to express Hong Kong — "order within chaos."

Hollywood Terrace

荷李活華庭

Location	Central, Hong Kong
Client	Hong Kong Housing Society
Year	1999
Awards	2003 ARCASIA Gold Medal 2001 HKIA Merit Award



The dense and textured fabric of old Central-Western District calls for a careful response to its urban environment, and an intricate appropriation between private and public realms. A system of public spaces is developed in the form of a series of landscaped gardens and terraces that, together with the punctuating stairs and lifts, form an elaborate twenty-four-hour pedestrian access connecting Queen's Road Central with Hollywood Road through and within the site. This public thoroughfare interweaves with the private pathways that lead to the lobbies and amenity areas for residents. The two routes intertwine spatially and the movements remain physically independent, connected only through an interesting play of visual empathies.
The residential portion comprises two towers of thirty-five-storey each. The units are carefully configured so that they all face predominantly towards north or south, avoiding overlooking and encouraging cross ventilation at the same time.

Eight Kwai Fong

8 桂芳街

Location	8 Kwai Fong Street, Happy Valley, HK
Client	New World Development Company Limited & Tung Wah Group of Hospitals
Year	2015
Award	A&D Trophy Awards 2016

Eight Kwai Fong (8KF) is an award-winning private residential project located in upmarket Happy Valley on Hong Kong island. The project aspires to infuse the experience of "a contemporary living culture" through thoughtful design, contextual sensitivity, compact planning and restrained elegance in façade and interior finishing.

Consolidating smaller lots into a single redevelopment, the site backs onto the lush greenery of Mount Cameron and Wong Nai Chung Gap to the south and southwest. Replacing the 4—5 storey "tong lau" blocks with verandahs occupying the entire site, the new street frontage is set back on three sides to better connect to adjoining fabric while allowing the greenery from the leisure parks and natural landscape nearby to "flow" in. The built mass is strategically located in relation to the low-rise police station across the street as well as adjacent high-rises to avoid overlooking. Taking advantage of sloping hillside topography, most of the apartments enjoy an open view with the Happy Valley racecourse in the background and cityscape across Island North.

The main tower is clad in beige granite in an attempt blend into the surroundings, while horizontal stone bands break up the verticality into three zones to generate an energetic façade that interplays with the podium and streetscape below. The 2-storey podium block playfully steps down along the sloping street level, inspired by the "cut & slide" concept that is also employed by the main tower. One of the steps creates a double volume space that defines the main entrance while the landscape feature at the street corner serves as a welcoming gesture. A 4-metre tall vertical green wall and large trees planted in the front and back courtyards provides ample greening focus that improves the micro-climate, while landscaping softens the hard building edge to improve pedestrian experience.

A double-height grand entrance portal, ground floor recreational facilities and landscaped gardens support 26 floors above, each with 6 apartments (2 studios and 4 one-bedrooms), providing a total of 156 apartments ranging from 30 — 49m². The typical arrangement of flats in a U-shape layout surrounding the core minimizes the common corridor while maximizing the potential for views. The space-planning and unit types represent a new approach to Hong Kong apartment living: fully furnished to maximize the living space with open planning. Rooms were partitioned by built-in cabinets and sliding pocket doors which release floor area to usable space. Spatial quality was never compromised by the relatively small unit size, while amenities enjoyed by residents outside the confines of their apartments include the clubhouse dining room, collectibles room, a hobby room, a lounge and gym room.

At 8KF, the features of balcony and utility platform have also been rethought beyond statutory requirements and normal "profit-maximising" practice. Sacrificing saleable area, these features were re-arranged to not only enhance the internal spatial quality but also improve the façade design by providing a neat appearance. Together with Low-E curtain walling, lightweight limestone cladding and maximizing off-site prefabrication, 8KF arguably offers an innovative benchmark on multiple aspects for Hong Kong's contemporary private housing design.

Weijen Wang 王維仁 Drawing / Ryo Fujimori 藤森亮

Mega-Housing Urban Form in New Towns of Hong Kong

香港新市鎮巨構住宅的城市形態

Facing challenges for housing provision in the last half-century, Hong Kong Government employs a semi-autocratic approach to meet the demand by establishing an efficient mode for building mega-housing in the urban fringe or reclaimed land, as well as developing new towns with mega-housing projects in the New Territory. Building along with the pro- vision of infrastructure including metro-rail, highway and public facilities, this unique mode of high-density mega-housing provision also became an effective measure of urban development as well as land control in the territory. Hong Kong's unique high-density urban from facilitated by this operational process of Development Control, went through a series of urban experiments since the 1950s before reaching the current model. Analysis with excellent illustrations of clarity and precision provided by Dr. Ryo Fujimori in his PhD research at Department of Architecture of Hong Kong University provides us a comprehensive view for the evaluating the issue.

The magnitude of urban issues in the post-war Hong Kong needed a strategic development with land-use planning as a tool not only able to address housing and its related issues but also to manage the land resources of the territory effectively. While developing large-scale housing estate like Wah Fu or Choi Hung in the 60s, the government also started to develop new planned towns like Kwun Tong and Tsuen Wan as both industrial and housing satellite in the immediate district adjacent to the main urban area. In 1970s, a territory-wide strategic development plan, including the urban area and new towns was established. In particular, the New Town Development Program in 1973 was set up not only to solve the housing problem but also to facilitate the industrial development by creating new urban land away from the urban center. At the same time, the program also intended to reduce urban congestion and to improve the environmental conditions, and the planning conditions were translated into the physical layout of master plans, directly affected their urban form and adjacent environment. Under this program, the new town developments from Tuen Mun to Sha Tin and Tai Po, from Yuan Long and Fangling to Tseung Kwan O in the New Territory were all curated through strong control under the government polices, efficiently allocated resources and public funds for transportation and infrastructure with clear development schedules.

The mechanism of development control on buildings is administered by various means covering planning control, land control, and building control enforced by legislative, contractual, and administrative measures. These measures of controls including OZPs, LPs, Lease Conditions, and PNAP effectively shape the way building is produced for Hong Kong's housing. Under the new planning and building regulations after the eighties expected to facilitate high-density living while safeguard basic healthy and safe living conditions, a building was separated vertically into two components: a podium structure that is used for public and commercial, as well as recreational and building services; and residential floors above the podium deck. The vertical separation of the building was a simple functional resolution to accommodate high plot-ratio assigned to each plot of development land that needs spaces for of both domestic individuals and public commerce. This mechanism of development control as a whole shaped a building complex into a typical form of a large podium structure and several towers of residential floors above the podium deck. In New Towns where town planning is individually exercised for each development, they appear as an integrated mega-form of a specific planning layout composed of its component buildings.

Allowing high plot-ratio of developments with podium of nearly 100% site coverage and pencil-like towers above, the mega-housing structure facilitates several repetitive towers based on one prototypical efficient radiant-unit layout with the extrusion of their floor plans for up to 40 stories in height. Such effective layout planning allows one tower to easily produce over 300 units with 8 units per floor

Period I, mid 1970s

Walk-Up Type


Lee Fat Path 6 1960


Lee Fat Path 7 1960


Mei Hang Building 1973


Ming Wai Building 1972


Mo Boon Building 1973


Tai Hong Building 1974


Tai Hing Building 1979


Man Po Building 1972


Koon Hing Building 1972


Lin Wo Building 1972


Shun Lee Mansion 1973


Palm Court 1974


Kam Lai Mansion 1973


Park Court 1975


Fu Hang Building 1974

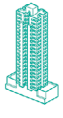

Yick Lee Building 1973

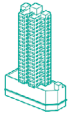
High-Rise Type


Tuen Mun Centre 1977


Golden Orchid Court 1979


Man Shing Building 1973


Top Court 1974


Shun Shing Building 1976

Period II, early 1980s


Nam Kwong Building 1982


Four Pearls Building 1983


Cheung Lung Building 1981

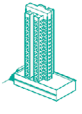

Wah Lee Building 1982


Yan Oi Building 1981

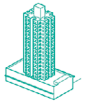

On Lai Building 1982


Man Cheong Building 1983

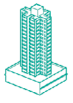

Kam Fat Building 1979

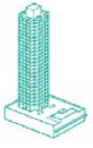

Common Bond Building 1981


Ka Hay Building 1982

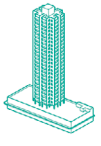

Dor Boa Building 1980

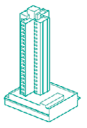

Wah Hing Mansion 1982


Hip Pont Building 1982

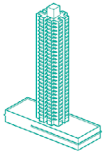

Lai Bo Building 1982


Lakeshore Building 1980

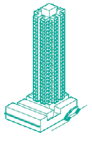

Man Bo Building 1982

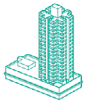

Kam Man Mansion 1982


Florence Mansion 1982


Lee Bo Building 1982


Tung Wai Court 1982

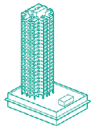

Victory Building 1984


Tuen Mun Fa Yuen 1981

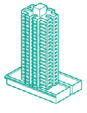

Tuen King Building 1982

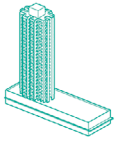

Kim Po Building 1981

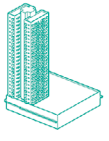

Come On Building 1981


Kai Hel Land Building 1982

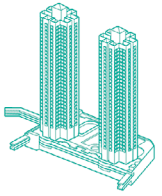

Look Yuen 1983


Rich Building 1981

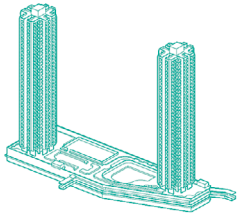

Wah Lok Mansion 1982

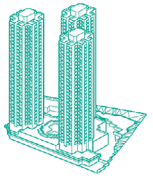

Elite Garden 1982

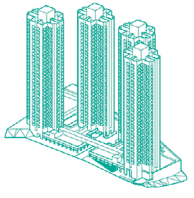
Period III, around 1990

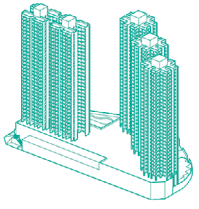

Venice Garden 1992

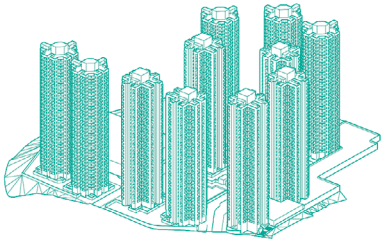

Blossom Garden 1993


Goodrich Garden 1993

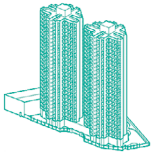

Hong Tak Gardens 1988


Tai Hing Gardens Phase I 1989


Greenland Garden 1989

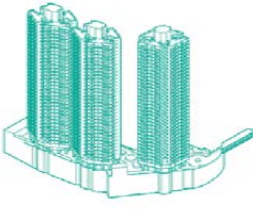

Tai Hing Gardens Phase II 1994

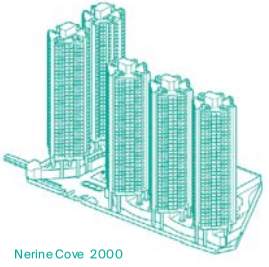
Period IV, around 2000


The Sea Crest 2001


Oceania Heights 2004

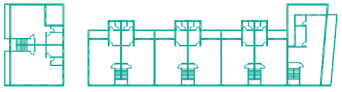

Chelsea Heights Phase I 1998

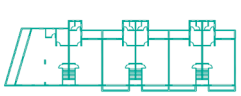

Chelsea Heights Phase II 2000

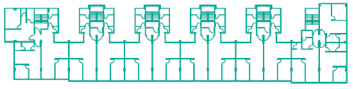

Nerine Cove 2000

Period I, mid 1970s

Walk-Up Type

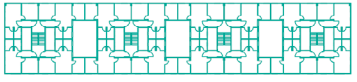

Lee Fat Path 6 58/60

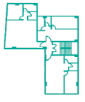

Lee Fat Path 7 58/60


Ming Wai Building 70/72

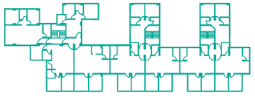

Man Po Building 70/72

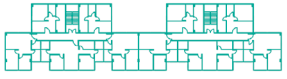

Tai Hong Building 72/74


Mei Hang Building 71/73


Mo Boon Building 71/73


Tai Hing Building 70/79


Palm Court 72/74

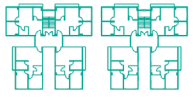

Shun Lee Mansion 72/73

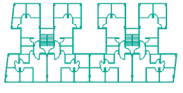

Koon Hing Building 70/72


Kam Lai Mansion 70/73

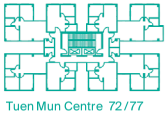

Lin Won Building 71/72

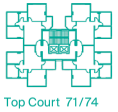

Fu Hang Building 72/74

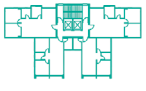

Park Court 72/75

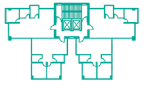

Yick Lee Building 71/73

High-Rise Type


Tuen Mun Centre 72/77


Top Court 71/74

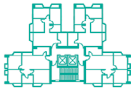

Man Shing Building 71/73

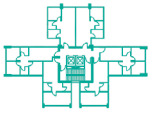

Shun Shing Building 72/76

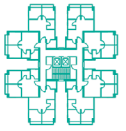

Golden Orchid Court 77/79

Period II, early 1980s

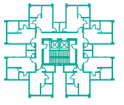

Four Pearls Building 80/82

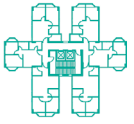

Ka Hay Building 80/82

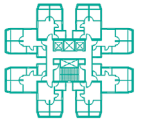

Kam Men Mansion 79/82


Kim Po Building 78/81

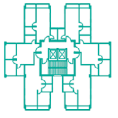

Cheung Lung Building 79/81


Dor Boa Building 78/80

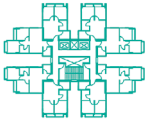

Florence Mansion 80/82


Come On Building 78/81

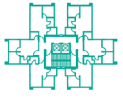

Wah Lee Building 83/86

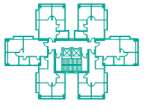

Wah Hing Mansion 80/82

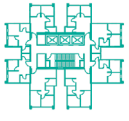

Lee Bo Building 79/82


Kai Hei Land Building 79/82

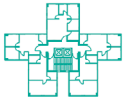
Yan Oi Building 78/81

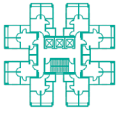

On Lai Building 80/82

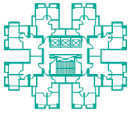

Hip Pont Building 79/82

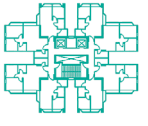

Tung Wai Court 79/83

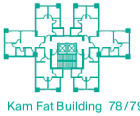

Look Yuen 79/83


Man Cheong Building 79/83


La Bo Building 79/82


Victory Building 81/84

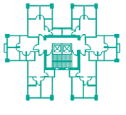

Rich Building 78/81

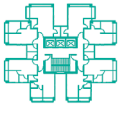

Kam Fat Building 78/79

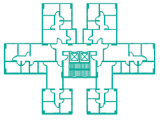

Lakeshore Building 77/80

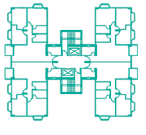

Tuen Mun Fa Yuan 78/81


Wah Lok Mansion 78/82

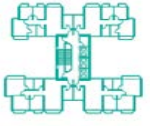

Common Bond Building 77/81

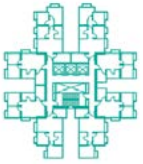

Man Bo Building 78/82


Tuen King Building 78/82

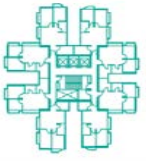

Elite Garden 79/82

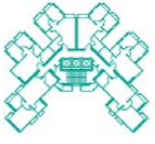
Period III, around 1990s

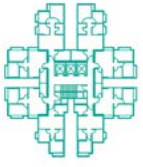

Greenland Garden (b) 86/89

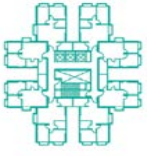

Goodrich Garden 90/93

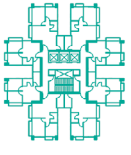

Hong Tak Gardens 85/88

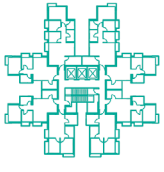

Venice Garden 90/92


Tai Hing Gardens Phase II (b) 89/94

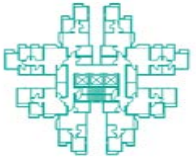

Tai Hing Gardens Phase I 87/89

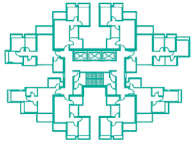

Blossom Garden 90/93


Greenland Garden (a) 86/89

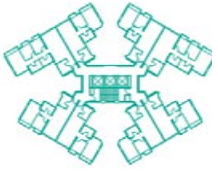

Tai Hing Gardens Phase II (a) 89/94

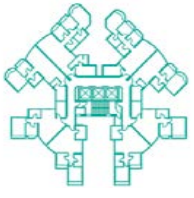
Period IV, around 2000


The Sea Crest 99/02


Oceania Heights 02/04


Chelsea Heights Phase I 94/98


Chelsea Heights Phase II 94/00


Nerine Cove 97/00

0 m 25m

for over 40 stories accommodating 1,000 people, while one mega-podium development of 8 towers of housing above the shopping podium would be able to accommodate 2,500 households, making it a community of 8,000 to 10,000 people. If one metro station with 10 to 12 mega-podium street blocks can serve 120,000 people, 4 metro stations would make a New Town of more than half-a-million population, equivalent to the scale of a typical European city. Although with excellent provisions for public facilities including hospital, library, sport grounds, swimming hall, adjacent greenery with hiking and bicycle trails, the planning codes geared toward maximum efficiency, as well as their very prescribed building ordinances based on strict concerns over health and safety, created a fast growing city like plan-extrusion with little rooms for architecture design in housing.

Hong Kong as a city takes pride of its successful housing policy is now facing multiple challenges including its shortage of land supply, the lack of provision for affordable flats, and also the missing of innovation in architectural design due to its efficient but monotonous podium-tower typology dominating the urban landscape. Ironically, even with all the efficiency-driven large-scaled developments, as the result of continuous booming and speculation over the high-profit real-estate market, demand still always surpass supply for Hong Kong, and housing remains an issue of quantity more than quality. Both private developers and public housing seek mainly efficient unit-layout for maximized interior space with views, packaged with standardized domestic program including TV-centered living room with bay window, numbers of bedroom with marble-tile finished bathroom, as well as granite-floored lobby and the luxury appearance of clubhouse facility.

Paradoxically, Hong Kong has been one of the few cities which realized progressive housing proposals of early 20th century modernist architects like Le Corbusier, are now facing challenges for having efficient high-rise housing with little room for design. The overly successful model of high-density housing is now producing cookie-cutter plan extrusion, and had became the main obstacle for design innovation allowing variety needed in housing. How can we design beyond plan extrusion while maintaining quantity and efficiency? How can we design vertical towers allowing horizontal variation? How do we design compact living with porosity and rooms for community? How would we be able to support smaller changes in space-use so to build from bottom up with the grassroots even in the mega-scaled housing?

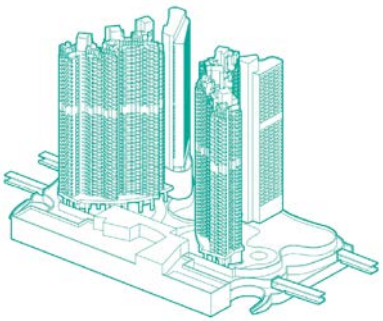
From urban and planning perspectives, how can we provide variety in housing design within the framework of mega-structure and its system of operation? How do we regenerate our high-density housing by allowing alternative mechanisms rather than a singular hegemonic mode of planning? If the nature and scale of our dominating planning have little capacity for facilitating adjustments and re-making of our urban fabric, how do we adjust the planning mechanism for facilitating smaller developments allowing diversity of housing typology? How are we able to build smaller grains of dwellings in the city while sustaining the habitation of metropolitan? How do we find ways to open up the designing process for our public housing like other cities can do?

Cities and their housing are living organisms that are to evolve. It is hoped that mega-structure for housing also indicates a situation in which parts are organized into a system while can also able to be unfolded into an open whole. City and Housing can be an incessant process with capacity for transformation wherein new parts are generated into multiple assemblages from within, allowing itself to be re-fabricated into multiple-layers of permeable and heterogeneous spaces of urbanity.

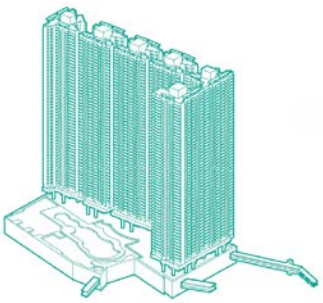
Residential Floor Plans for Buildings in Tuen Mun / Ryo Fujimori

OU, other specified uses

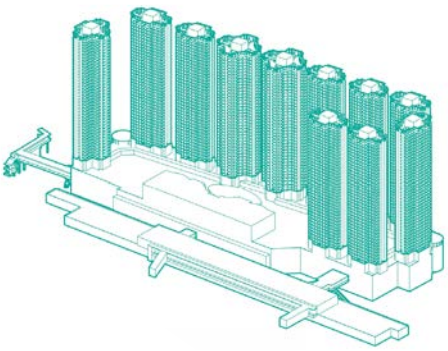
Residential Floor
Plans for Buildings in Tuen Mun / Ryo Fujimori



The Wings (98 / 11)

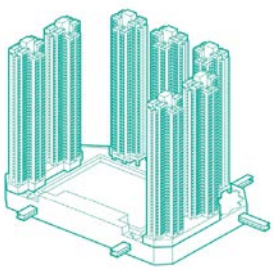


Residence Oasis (02 / 04)



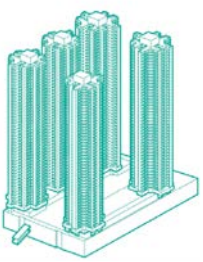
Metro City Phase II (93 / 99)

C / R, Commercial / Residential

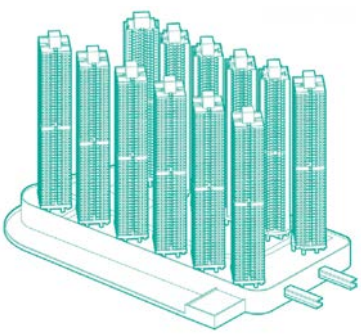


East Point City (93 / 97)

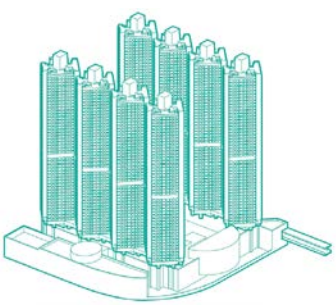
The Metropolis (94 / 99)



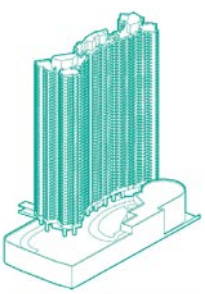
Nan Fung Plaza (95 / 99)



Park Central (97 / 03)

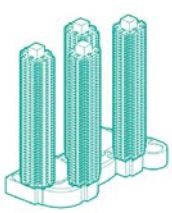


Tseung Kwan O Plaza (97 / 03)

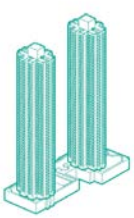


The Grandiose (02 / 06)

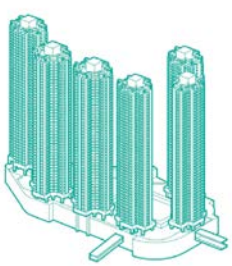
R (A), Residential (Group A)



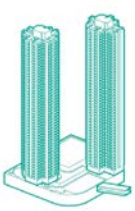
Well On Garden (91 / 94)



Finery Park (91 / 94



Metro City Phase I (92 / 96)



Maritime Bay (95 / 98)

La Cite Noble (94 / 99)

Reflections
思考

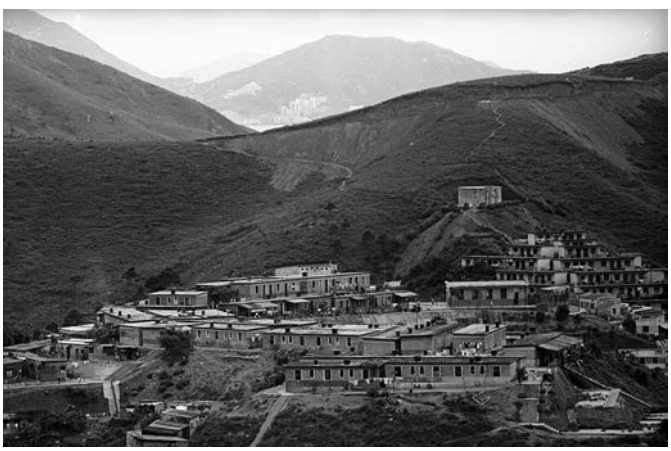
Carmen Tsui 徐頌雯

Can NGOs still provide affordable homes to Hong Kong?

非政府組織能否繼續為香港提供公屋?

1 The Asbury Village in 1962, developed by the Methodist Church in the Tai Wo Hau Cottage Resettlement Area. / Information Services Department, HKSAR

1



In his 2011 — 2012 Policy Address, the Chief Executive of Hong Kong announced that the government would actively support nongovernmental organizations' (NGOs) plans to provide housing for working youths who are unable to afford their own living space. Currently, the government is considering fully funding five NGOs to construct youth hostels on sites owned by the NGOs themselves. **Table 1** The NGOs will run the youth hostels on a self-financing basis with a rent ceiling set below 60% of the market rent price for flats of similar size in the nearby areas. This lowered rent, the government hopes, would allow young tenants in Hong Kong to accumulate savings in order to pursue their aspirations for personal development. In fact, the Youth Hostel Scheme is not the first time that the Hong Kong government has involved NGOs for the provision of affordable housing; during the 1950s and 1960s, a number of philanthropic housing agencies were established to provide low-cost, working-class accommodations, but most of them have nowadays ceased operation. With the backlog of public housing applications recently reaching a record high, should we or could we restore philanthropic housing traditions in Hong Kong? Can NGOs today become providers of affordable homes?

Beginning of the Worldwide Philanthropic Housing Tradition

The shortage of affordable housing is a problem common to most modern societies. Before the First World War, it was non-profit and charitable organizations, not local government, that did the most to respond to the housing problem. The philanthropic housing tradition began in Victorian Britain, when a group of philanthropists founded the Metropolitan Association for Improving the Dwellings of the Industrious Classes in 1841 to provide salubrious and affordable accommodations for the working-class in London. From that point forward, more and more British philanthropists formed associations to solicit donations, build low-cost "model tenements", as they were named, and reinvest the proceeds in additional projects. Between 1840 and 1914, at least 43 NGOs were established in London, producing more than 35,864 dwellings, or over 2.5 times the combined contributions of various government agencies during the same period.[1] These historical examples showed that decent housing could be provided by NGOs at rents that were affordable for the working class. Today, the Guinness Partnership, the Peabody Trust, and the Octavia Hill Housing Trust are among the oldest and largest nongovernmental social housing providers in the UK. Housing organizations of similar nature are also active in many countries, including Canada, Australia, and the United States.

Philanthropic Housing in Post-war Hong Kong

Similar to the West, philanthropic housing occupies an important episode in Hong Kong's modern housing history, but the topic is curiously understudied. The influx of war refugees from the mainland that began in the late 1930s caused a huge housing demand in Hong Kong, but the government refused to use public fund to accommodate them, insisting that the colony's priority was to rebuild the war-torn economy. Although uncommitted to a definite resettlement program, the colonial government welcomed voluntary contribution. Beginning in 1948, the government granted land by private treaty and at a reduced rate to NGOs in an effort to develop low-cost, non-profit housing. Many NGOs responded by developing cottage-style resettlement villages for squatters and refugees at sites designated by the government. **Fig.1** The major providers were local philanthropic organizations like the Kowloon City Fire Relief Committee and the Hong Kong Settlers Housing Corporation, as well as religious organizations like the National Catholic Welfare Committee, the Maryknoll Sisters, and the Methodist Church.

While most NGOs built cottage villages to accommodate the poor, only four organizations had the vision to develop multi-storey housing. The first multi-storey housing estate, the Model Housing Estate in North Point, was completed in 1952 by the Hong Kong Model Housing Society, a private agency working closely with the government. The Hong Kong and Shanghai Bank agreed to lend money to the project on the condition that no one-room units were be built for fear that they would quickly turn into slums.[2] The design, done by architects Chau and Lee, was therefore all two-room units, with the kitchen and lavatory accessed from the balcony. **Fig.2** When the news of the Model Housing Estate was first reported in the media, it quickly caught the attention of the locals. The Hong Kong Model Housing Society received more than 500 applications for the 100 units available in the first two blocks that had been completed in 1952, out of the six blocks planned.[3] Around the same time, the Hong Kong Housing Society, an independent agency established by the Hong Kong Social Welfare Council using the donations from London's Air Raid Distress Fund, developed the Sheung Li Uk Estate in Sham Shui Po. Designed by the architect T.S.C. Feltham, the estate provided 360 units in five blocks for almost 1900 tenants. Each unit was comprised of one living space, a kitchen, a balcony and a lavatory off of the balcony.

Both the Model Housing Estate and the Sheung Li Uk Estate had much better conditions as compared to the existing tenement houses and resettlement cottages. Seeing the success of these pilot projects, Governor Grantham made a call in March 1953

2 Model Housing Estate / Carmen Tsui

for contribution from all public spirited citizens to help solve the housing shortage of the colony.[4] Subsequently, the Hong Kong Economic Housing Society developed the Lady Grantham Villas in 1954, whereas the Hong Kong Settlers Housing Corporation, an agency heavily involved in the building of resettlement cottages, developed its only one multi-storey housing estate at Tai Hang Sai in 1965. **Fig. 3/4**

The history of philanthropic housing in Hong Kong shows that NGOs responded faster than the government in meeting the society's needs. Prior to these philanthropic housing estates, the colonial government had never seriously contemplated the provision of permanent subsidized accommodations for the Hong Kong people. Philanthropic housing estates provided the government a very useful reference not only on the planning and architectural design, but also on the management, leasing, and allocation of subsidized housing. On numerous occasions, K. M. A. Barnett, then Chairman of the Urban Council and in charge of squatter resettlement, pointed out that multi-storey housing like the Sheung Li Uk demonstrated a more effective use of land as compared to the single-storey resettlement cottages.[5] This may have inspired the colonial government to develop multi-storey resettlement blocks when the Shek Kip Mei fire broke out in 1953.

NGOs as Third Sector of Housing Provision

Nongovernmental housing organizations were most active from the 1950s to the 1960s, a period of tremendous housing shortage in Hong Kong. Nevertheless, ever since the government started the public housing programme, it had gradually withdrawn the financial support to nongovernmental housing organizations. As a result, many NGOs have ceased operations. The Hong Kong Housing Society is an exception; it has managed to secure bank loans and not only has it survived, it has become the largest nongovernmental housing organization today. Over the past decades, it has developed 20 rental housing estates, many of them, such as Ming Wah Dai Ha, Lai Tak Tsuen and Kwun Lung Lau, were significant from an architectural standpoint. **Fig. 5/7**

It is vital to point out that the development of philanthropic housing does not mean replacing governmental investments in public housing. Rather, there is a role for NGOs to supplement what the government has not been able to achieve. For example, the Hong Kong Housing Society has been developing new types of affordable homes, including the flat-for-sale housing, sandwich class housing, as well as senior citizen residences. Other NGOs are providing, albeit on a smaller scale, various forms of subsidized housing for different segments of society. The Caritas, for instance, maintains an affordable hostel service for students, single persons, and small families. Both the Po Leung Kuk and the Helping Hand operate elderly homes. Currently, a team from the Hong Kong Institute of Architects is collaborating with a social enterprise, LightBe, to transform the ex-Kowloon Textile Family Dormitory in Sham Tseng into affordable homes for 45 families in need. All these initiatives prove that, besides the government and commercial developers, there is a third way for the provision of affordable housing.[6]

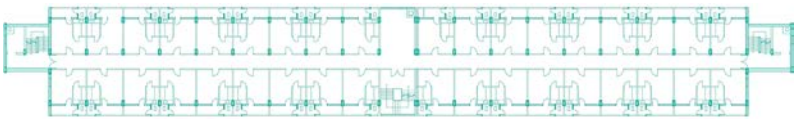
1 Susannah Morris, "Market Solutions for Social Problems: Working-Class Housing in Nineteenth-Century London," *The Economic History Review* 54, no. 3 (August 1, 2001): 503.
2 Gavin Ure, *Governors, Politics, and the Colonial Office: Public Policy in Hong Kong, 1918-58* (Hong Kong: Hong Kong University Press, 2012), 150.
3 "North Point Flats for Workers: Governor Visits New Building," *South China Morning Post*, April 29, 1952.
4 Daniel N. F. Chen, "Economic Housig Scheme Lady Grantham Villas: Volume I" (Hong Kong: Hong Kong Economic Housing Society, 1954).
5 "Plan for Squatters: New Policy of Government Explained in Broadcast," *South China Morning Post*, January 18, 1952.
6 The work described in this paper was fully supported by a grant from the Research Grants Council of the Hong Kong Special Administrative Region, China (Project No. CityU 11408414).

Table 1
Details of the Youth Hostel Scheme Projects under planning.

	Participating NGO	Location of the Youth Hostel	Estimated No. of Units	Estimated No. of Hostel Places
1	Tung Wah Group of Hospitals	Sheung Wan	210	302
2	The Hong Kong Federation of Youth Groups	Tai Po	78	80
3	Hong Kong Association of Youth Development	Mong Kok	72	90
4	The Hong Kong Girl Guides Association	Jordon	534	534
5	Po Leung Kuk	Yuen Long	1248	1680
		Total	2142	2686

Source: Appendix I, LC Paper No. CB (2)1128/15-16(04).

3



4

3 Elevation of Block A,
Tai Hang Sai Estate / Carmen Tsui
4 Typical floor plan of Block A,
Tai Hang Sai Estate / Carmen Tsui
5 Model Housing Estate / Edward Ng Ka Lok
6 Lai Tak Tsuen / Edward Ng Ka Lok
7 Ming Wah Dai Ha / Edward Ng Ka Lok

5 Kwun Lung Lau in 1968. The estate was design by the architect Michael Payne.
Information Services Department, HKSAR

6

7

A Call for Housing beyond Uniformity

超越單調性的住宅

HKU MArch Studio by Prof. Winy Maas
Hong Kong Tower Revolution (2013)
Beyond Extrusion (2014)

More than 7 million people currently live on Hong Kong's 1,110 km² of land. According to statistics from the Hong Kong Planning Department a small percentage of 24.1 is built up land of which only 6.9% is residential.[1] This leads to a high population density which makes the city both an example of high efficiency and a comprehensive infrastructure system and drives real estate prices higher than in any other place in the world. "As a result of high land prices and strict regulations, Hong Kong's population lives in what are close to the smallest houses in the world. The limitations on housing have halted potential growth, discouraged diversity and blocked innovation."[2] Hong Kong has produced an enormous amount of overpriced but monotonous housing towers over the past decades, that represent a highly mediocre quality of life. While the government oversaw conceptualization by setting regulations and guidelines, property developers supposedly provided the concept and design meant to maximize whatever resources available amidst the strict regulations. Current housing development in Hong Kong has mainly become an expression of the many regulations of the building ordinance and a desire for a maximization of short term profit. It lacks architectural excitement and fails to provide desirable living conditions. Can Hong Kong's housing development escape its unrelenting uniformity?

1 *Planning Data, Land Utilization in Hong Kong 2014*, Hong Kong Government, online available at www.pland.gov.hk/pland_en/info_serv/statistic/landu.html [Accessed 12 September 2016]
2 *Investment strategies for Hong Kong*, page 110, Tihamér Salij, Hong Kong Fantasies – Challenging World- Class City Standards, The Why Factory / TU Delft, NAI Publishers, 2011, ISBN 978-90-5662-764-5

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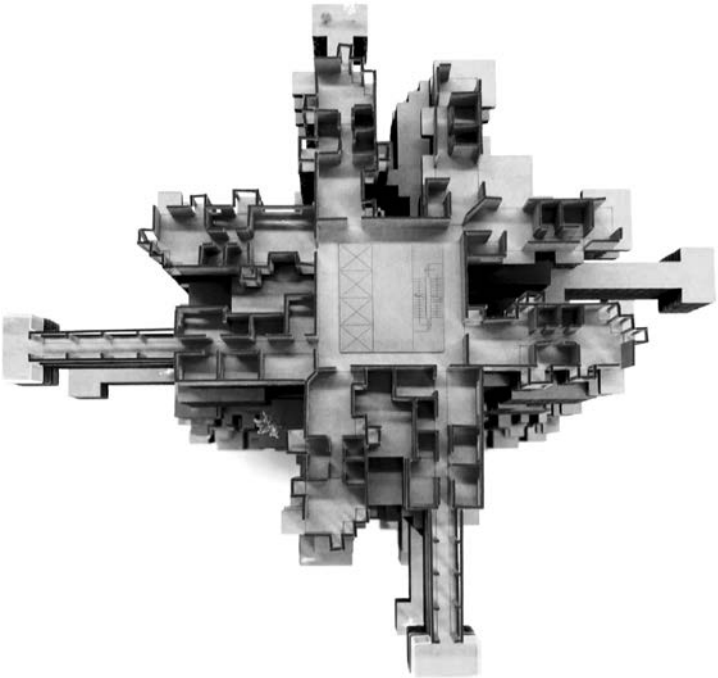
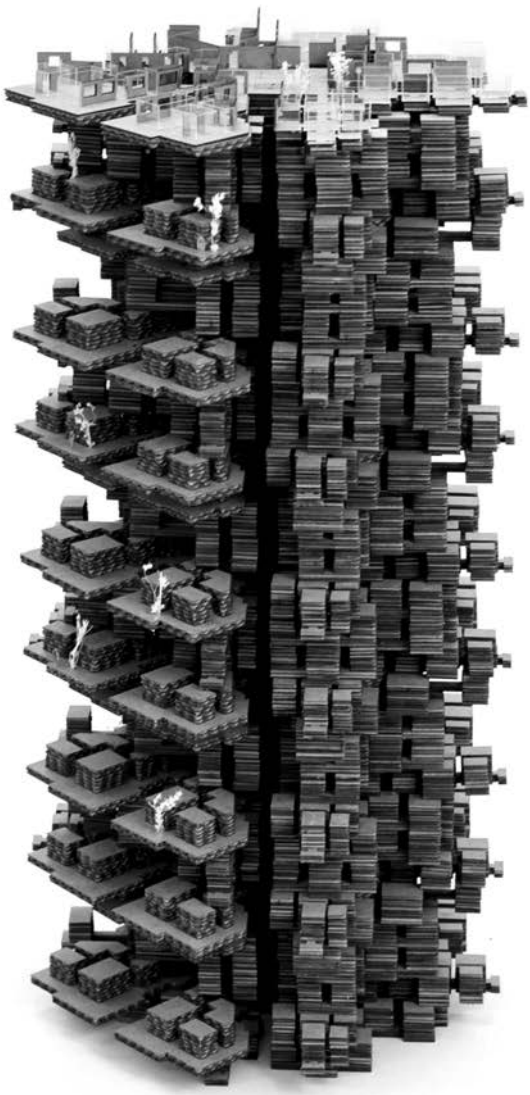




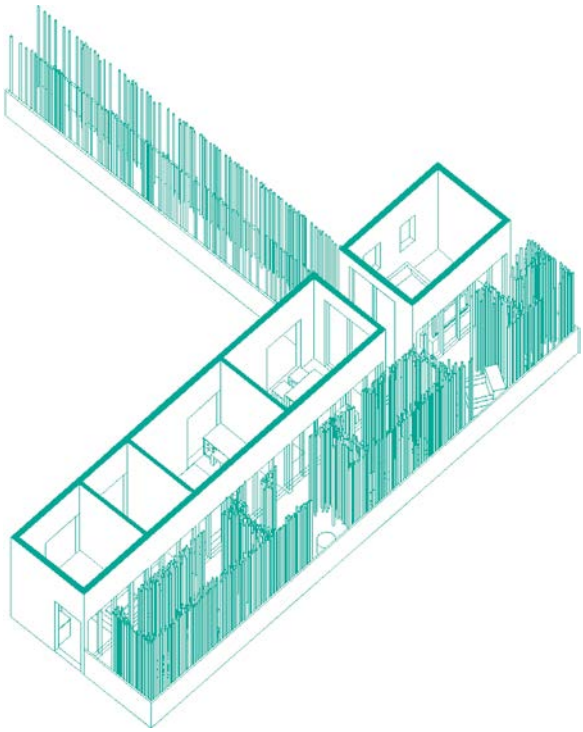
1 Cardboard Model / MArch
Design Studio (Fall, 2013)
The Why Factory
HKU

Undesirable quality of life

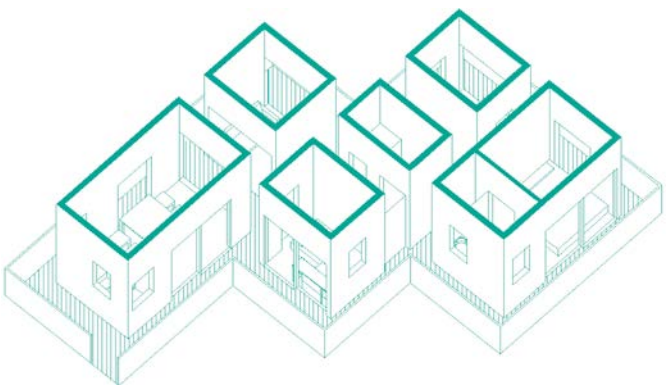
Hong Kong is one of the world's economical most powerful cities next to London, Tokyo, Paris and New York. It can be seen as one of the richest and wealthiest cities in the world. But for the majority of its residents, life is extremely difficult and the demands of surviving in this city place residents under increasing stress. Despite this stressful condition, according to statistics from Japan's Welfare Ministry, Hong Kong citizens have the highest life expectancy rate in the world with an average life for men of 81.24 years and for women 87.32 years.[3] But wealth and growing old in an economical power city does not guarantee a good quality of life. According to Mercer, one of the world's largest human resource consulting firms, Hong Kong ranks seventieth (70) on the Quality of Living Index 2016.[4] According to The Economist Intelligence Unit, Hong Kong scores very high on the latest Worldwide Cost of Living Index 2016[5], ranking Hong Kong on third place behind Zurich in Switzerland (2) and Singapore (1). According to the Global Living Report 2016 by CBRE, a London-based residential consultancy firm, Hong Kong is world's most expensive residential location with an average price of US$1,501.88 per square foot.[6] The property value in Singapore, ranking on second place, is about US$920, which is 40% lower than in Hong Kong. According to the 12th Annual Demographia International Housing Affordability Survey 2016 the city of Hong Kong has the world's least affordable housing market. The research report by UBS, a Swiss global financial services company, ranks Hong Kong second in the Global Real Estate Bubble Index with a score of 1.67 after London scoring 1.88. A record-high price-to-income ratio of 21 and a price-to-rent ratio of 33 points have made housing prices in Hong Kong fundamentally unjustified. In cities like Hong Kong and London housing prices are mainly driven by global investment demand, rather than local household earnings. According to the UBS Global Real Estate Bubble Index, "this has made Hong Kong one of the world's most expensive cities for private housing. The average yearly income of a highly skilled worker can buy only around 3m² of living space in the private transactional market. For low income workers, social housing programs mitigate the high prices, though housing conditions remain strained."[7] If the international attractiveness of the city would decrease, then the city is in big trouble.
Quality-of-life aspects in Hong Kong in general are becoming more and more undesirable: Hong Kong suffers from extremely high property prices, shrinking living spaces, uninteresting public spaces, an increasing high work pressure with long working hours, disappearing old and traditional shops, underdeveloped and non-pedestrianized shopping streets, increasing amount of giant monotonous shopping malls with multiple housing towers on top, and last but not least a worsening pollution. And while the government hold onto strict building regulations and most property developers hold onto their development strategy and will to maximize short term profits Hong Kong continues to be dominated by a vast mediocre and undiversified urban fabric which keeps the city highly compact, functional, without excitement and authenticity. This kind of city development, however, has a fundamentally negative impact on quality of life and does not improve the wellbeing of its citizens.
"Many claim that Hong Kong has no space to extend — that new developments would threaten its nature and waterfronts. In fact, the opposite is true. Hong Kong has plenty of space to build."[8] Hong Kong has over 60% of unbuilt land and plenty of vacant industrial buildings and sites in areas such as Kwun Tong, Wong Chuk Hang or Aberdeen which could be converted into residential buildings. Theoretically, Hong Kong should have enough developable land to house all inhabitants in an acceptable housing unit size with relative comfort and without harming the environment. Funny enough, though, that the Hong Kong government and developers together are struggling to turn theory into practice and invest properly in a housing market that is both affordable and one that can add up to an improvement of the quality of living standards and the wellbeing of its citizens.

According to the Hong Kong Housing Authority the average living space in Hong Kong is 13.1 square meters per person[9], which is one of the smallest in the world. About half of Hong Kong's population "is forced to live in cheap, public rental units or some form of subsidized housing. And even that is a privilege to be won through lotteries or years on the waiting list."[10] There is intense competition for any affordable housing in Hong Kong. The young generation are often forced to live and stay with their parents or to live in a home too small to start a family in.

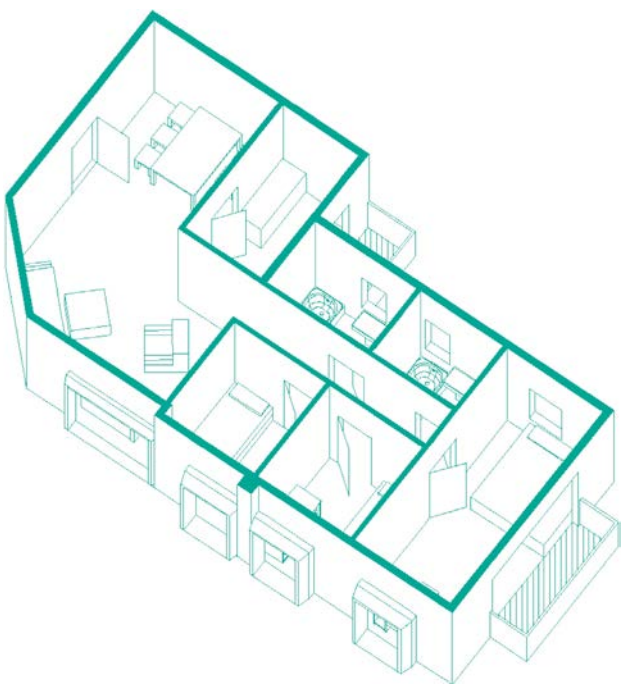
3 *Public Notice — Status of Compliance*, Department of Health and Family Welfare, Ministry of Health and Family, Japan, online available at http://mohfw.nic.in/index3.php?lang=1&deptid=24 (Accessed 12 September 2016)
4 2016 Quality of Living Rankings, Mercer, online available at www.imercer.com/content/mobility/quality-of-living-city-rankings.html (Accessed 12 September 2016)
5 *Worldwide Cost of Living Index 2016*, a special report from the Economist Intelligence Unit, online available at http://pages.eiu.com/rs/783-XMC-194/images/EIU_WCOL2016_FreeReport_FINAL_NEW.pdf?mkt_tok=3RkMMJWWfF9wsRovuK7AZKXonjHpfsX56%2B8vXqW2IMI%2F0ER3fOvrPUfGjI4JTsthI%2BSLDwEYGJlv6SgFTbjGMbht2bgMUhU%3D [Accessed 12 September 2016]
6 *Global Living 2016- A city by city review*, CBRE, online available at www.cbreresidential.com/uk/sites/uk-residential/files/Global%20Living%202016.pdf [Accessed 12 September 2016]
7 *UBS Global Real Estate Bubble Index*, online available at www.agefi.com/uploads/media/UBS_Global_Real_Estate_Bubble_Index_Study.pdf [Accessed 12 September 2016]
8 *Dream-City Of Contrasts*, page 46, Tihamér Salij, Hong Kong Fantasies — Challenging World-Class City Standards, The Why Factory/ TU Delft, NAI Publishers, 2011, ISBN 978-90-5662-764-5
9 *Housing in Figures 2016*, Hong Kong Housing Authority, online available at www.housingauthority.gov.hk/en/common/pdf/about-us/publications-and-statistics/HIF.pdf (Accessed 12 September 2016)
10 *Just Saying — Hong Kong has enough money and land, but no guts or will to solve its housing crisis*, Yonden Lhatoo, South China Morning Post, published 19 May 2016, online available at www.scmp.com/comment/insight-opinion/article/1947676/hong-kong-has-enough-money-and-land-no-guts-or-will-solve (Accessed 12 September 2016)



2 Bathing-in-Nature apartment / Concept for an apartment lay outing with improved bathroom activities, maximized natural ventilation and cooling / The Why Factory / Tihamér Salij



3 Hutong-Village apartment / Concept for an apartment lay outing with maximized balcony sapce and natural ventilation / The Why Factory HKU / Bob Cheng



4 Typical apartment of 80 m²
The Why Factory / HKU / Bob Cheng, Tihamér Salij

Many Hong Kong families with the size of about six individuals, representing 3 generations, live together in less than 40 square meter apartments. Currently, the majority of Hong Kong residents are forced to sacrifice the quality and size of their homes and to adjust their social and family lives accordingly.

Hong Kong's urban fabric is becoming ever denser with high-end apartment towers, luxurious hotels and giant shopping malls and a car-based infrastructure that altogether at the same time destroy precious public space, urban greenery, attractive local shops, street markets, and other small scale facilities.

Such an unhealthy mix of maximum profit and stringent building regulations has led to the adoption of generic typologies in order to standardize processes and minimize costs. The lack of urban diversity and increase of extreme small housing units at high prices have significantly contributed to the low quality-of-life standards and reduced the well-being of Hong Kong residents.

Standardized housing production

Hong Kong has established a rich history of tall buildings with more than 1,294 towers that are over 150 meters tall.[11] However, Hong Kong's housing tower typologies have progressed from a relatively diverse collection from the 1950s to a narrow spectrum of so-called "Podium Towers" since the 1970s. Despite the great history in building tall, Hong Kong has not been able to fully explore and experiment with its tallness and its desire for density. Instead the urban fabric of Hong Kong has evolved into a vertical sprawl of extremely homogeneous tall residential towers on top of (over-)commercialized podiums which reflect the forces of believing in land scarcity and profit maximization of the market economy.
For the past fifty years Hong Kong's housing production has relied on a highly standardized and restrictive design code. Strict building regulations and development culture has suffocated most of the creativity in residential building design and has led to a severely undiversified housing market.

If the architect combines all the features based on control of the building form through various issues of the building regulations, it results in a standardized apartment plan and a limited scope of design options and qualities. The majority of Hong Kong's housing design has thus become extremely uniform and repetitive. Most residential buildings in Hong Kong have a central core, which becomes the pivot of flipping and mirroring standardized apartment floor plans. By simply extruding the tower floor plan vertically along the core, the cost of production and construction time is reduced.

Housing in Hong Kong simply does not offer much variation. It lacks variation in size and form, and homes are typically without sufficient outdoor spaces and other living qualities such as daylight, natural ventilation or unblocked views. The people's choice is within an endless repetition of almost the same.

Exploring housing beyond uniformity

How can Hong Kong's housing development escape its highly standardized design process and denial of diversity? How might architects together with developers bypass strict planning and building regulations? How might they add more value by creative design? How might they realize innovative and attractive housing towers, towers that would radically change Hong Kong? How might they overcome uniformity and generate more diversity and better qualities? How to transform the potential constraints of a typical Hong Kong apartment into new apartment organizations and lay outings?

What if activities of living such as cooking, dining, bathing, sleeping, storing, relaxing, cleaning, and serving could be improved? How to transform the potential constraints of a typical apartment into new apartment organizations and lay outings which aims to support these improved activities? What desires can be supported and what needs to be sacrificed? What specialisms can be created?

Can we imagine apartments that support swimming around the house? And what if apartments include sufficient private space for the maid? What if apartments allow for dining with all your friends and family featuring best panoramic views? What if all bedrooms would have sky views which supports sleeping under the stars? Or, what if all walls could absorb all your stuff and belongings and could be turned into valuable storage space? What if the apartment would feature one or more fireplaces to gather around and sing? What if all rooms would each have access to their own private balcony space? What apartment organizations then would best support these specialisms? What set of spatial qualities do each of these specialisms require? Some spatial qualities would probably include higher ceilings, more window openings, more outdoor spaces or more privacy. Other qualities would ask for different connections, fewer walls, better natural cooling, more sustainable measures or better access or views to the outdoor. Are these apartments organized in a more efficient way? Do they offer an enhanced natural lighting and ventilation, better views, or more outdoor spaces? Do these improved apartment organizations lead to better living conditions? And do they propose solutions to incentivize change and generate more diversity and better qualities of living?

These and more questions have been explored and studied during two Master's studios called "Hong Kong Tower Revolution"[12] and "Beyond Extrusion"[13], held at the Department of Architecture of the Hong Kong University in the years 2013 and 2014. Both studios were organized by the think-tank The Why Factory[14] and showcased various new concepts for homes and housing towers, concepts that go beyond the current model of simple extrusion. The results of both studios formed the basis of the upcoming publication "Choice — Hong Kong Housing beyond uniformity"[15] by The Why Factory in collaboration with the Hong Kong University. This publication is edited by Winy Maas, Tihamér Salij and Martine Vledder and

can be seen as a first attempt to explore more balance between population density and quality of life.

Towards more diversity and design freedom

If Hong Kong desires to become a more attractive, prosperous and livable city and aims to enhance the wellbeing of its citizens it must start with producing a more diversified housing supply, one that is both affordable and attractive for low and middle income people. In order to achieve that, it must embrace diversity as a key factor to create a healthier housing market and ensure happiness of Hong Kong citizens. Consequently, the governmental authorities might have to redefine and adjust the building regulations, loosen its over-restrictive guidelines and, as the sole owner of the land, change its land supply policy by making more and smarter use of the remaining 60% of unbuilt land. Such reform could give way to more design freedom and creativity among architects and developers from which the city and housing market only could benefit. And if both the government and developers would forfeit only 10% of their profit and reinvest that money to allow for more freedom and experimentation in design, Hong Kong could become a more livable city for its citizens, and attract new citizens as well as investors and new industries.

It might be wise to formulate a constructive and visionary housing development plan for the next ten to twenty years which is written by and involves all stakeholders such as government, policy-makers, developers, environmentalists, sociologists, engineers, architects, as well as potential users representing all layers of society. A plan that embraces diversity, design freedom and more experimentation.

5 Cardboard Model / MArch Design Studio (Fall, 2013)
The Why Factory / The University of Hong Kong

11 *Cities with most skyscrapers*, Emporis, online available at www.emporis.com/statistics/most-skyscraper-cities-worldwide (Accessed 12 September 2016)
12 *Hong Kong Tower Revolution*, Architecture and Urban Design III (ARCH 5001), Studio Professor: Winy Maas (MVRDV/ The Why Factory, TU Delft), Studio Tutor: Tihamér Salij (The Why Factory, TU Delft, Space Intelligence Agency), Scripting Tutors: Sander Mulders with Arend van Waart, Students: Au Wing Yi, Chak Tsz Kin, Chan Chung Man, Chan Ian Yin Yan, Chan Pui Yin, Chau Shek Lun, Cheng Ching, Ip Kai Hong, Liu Kemeng, Mok Wang Chee, Tang Ho Yin, Kong Ho Ching, Kwok Ka Ching, Lau Xin Yee, Lee Kin Wai, Li Mei Yu, Lung Man Ching, Ma Ching Yi, Suen Wing Yin, Sze Ivy, Sze Ying Ying, Yeung Cho Yui, Yeung Ho Man
13 *Beyond Extrusion*, Architecture and Urban Design III (ARCH 5001), Studio Professor: Winy Maas (MVRDV/ The Why Factory, TU Delft), Studio Tutor: Tihamér Salij (The Why Factory, TU Delft, Space Intelligence Agency), Martine Vledder (The Why Factory, PolyLester), Modeling Tutor: Donn Holohan (The University of Hong Kong), Students: Au Yeung Chun Yu Joey, Chan Fong Tong Fred S, Cheng Pok Him Bob, Ching Ka Ho Fred, Henao Granda Jan Esteban, Ho Sheung Hay Terence, Hu Xiangdong Hock, Ko Pak Kan Zeth, Li Zhixin Allison, Liu Chuen Yung Vincent, Ma Yue, Qin Liting Ting, Tang Tak Shing Kelvin, Wen Fan, Wu Yucong, Xie Junni, Ffion, Ho Yin Sunny Cha, Sai Bond, Man Hei Kennif, Han Pat
14 The Why Factory is a global think-tank and research institute, run by MVRDV and Delft University of Technology and led by professor Winy Maas.
15 *Choice – Hong Kong Housing beyond uniformity* is currently the working title of the upcoming book in The Why Factory's Future Cities publication series and follows Absolute Leisure, Barba, We Want World Wonders, City Shock, Hong Kong Fantasies, Vertical Village, Green Dream, The Why Factor(y) and the Future City. All books have been published by and are available at NAI010 publishers, Rotterdam The Netherlands.

Phoebe Kung 龔棋樂

Keeping it grounded

維持在地性

1

Reclaiming Public Space as Grounds for Community Activism

For our low-income population, security in their residential environment — security from the natural elements, from criminals, and from authority — is the first essential step to liberation.

Oscar Newman Defensible Space (1972)

2

Long a contentious issue in Hong Kong, housing has never been more urgently in need of an intervention than this decade. The latest Long Term Housing Strategy published in 2014 has introduced little new insight into the administration's plan to fundamentally alter the path that housing development has been set since the late 1990s [1], the same path that has brought upon to the city soaring housing prices, a lopsided and uncreative economy, and most critically, deteriorating living standards for the lowest socioeconomic class [2].

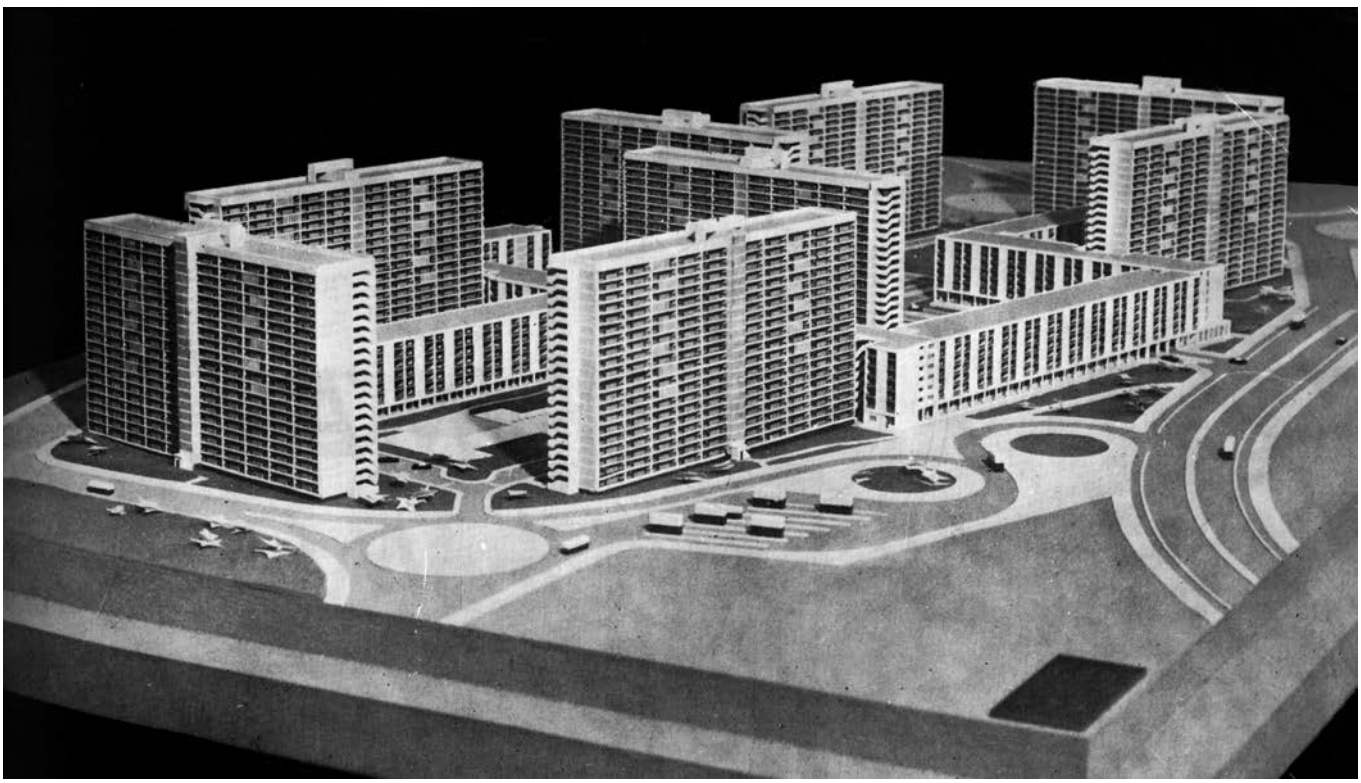
The more unfortunate ones of this society, held in the "purgatory" that is public housing waiting lists, are condemned to seeking shelter in marginally inhabitable spaces — subdivided closets, rooftop tin shacks, and literal cages. This demographic is hardly in the minority [3], and has gained high-profile public attention in recent years due to incidents of fire outbreaks, infestations, and perhaps worst of all, hasty forced evictions by the administration. Beyond being stripped of the most basic living conditions, occupants are denied a physical platform on which their collective needs could be amplified and heard, a condition that even the "well-housed" public housing residents cannot escape.

Throughout the last half century of Hong Kong public housing there has been a decline in public areas that residents could effectively enjoy. Where first- and second- generation public housing lacked in amenities such as private bathrooms and kitchens, they made up for with their human scale and an abundance of open areas, to which residents had visual surveillance and easy access. In turn, communal activities often flourished. While the recent crop of public housing provides sufficient modern comforts for the individual unit, its density and towering forms evoke a nightmarish version of Le Corbusier's Radiant City, leavings its residual manicured public areas uninviting and unutilized. Studies and research have shown a positive correlation between residents' proximity to their communal areas and the sense of ownership and safety the community derives from them. [4] The inevitable push towards higher plot ratios in later generations of extruded public housing towers makes evident the reality that residents are physically alienated from the barely generous $1m^2$ (per capita) of recreational space they are entitled to, as loosely stipulated [5] by the Hong Kong Planning Standards and Guidelines. Worsening the condition is the emergence of Link REIT in recent years, which in its singular profit-driven vision, has eradicated familiar local shops in favour of well-established chain stores.[6] A chronic lack of accessible public forums and casual daily interactions with familiar neighbors inevitably breeds social apathy in residents, whose support is essential as negotiating capital to community activist groups.

1 Chan, S.M., "New housing strategy still gets it all wrong", tr. Alan Lee, *Hong Kong Economic Journal*, 22 December 2014, www.ejinsight.com/20141223-new-housing-strategy-still-gets-it-all-wrong/, [accessed 15 August 2016].
2 Ho, A., "The unlivable dwellings in Hong Kong and the minimum living space", *Hong Kong Free Press*, 27 July 2015, www.hongkongfp.com/ 2015/07/27/the-unlivable-dwellings-in-hong-kong-and-the-minimum-living-space, [accessed 20 August 2016].
3 Oxfam Hong Kong, *Research on the Living Conditions of Tenant Households Who Have Been on the Waiting List for Public Rental Housing for Over 3 Years*, 2013.
4 Law, E.C.W., "Neighbourhood and Building Forms - A Study Of The Hong Kong Public Housing Blocks", Master's Thesis, The University of British Columbia, 1998, p.103.
5 Fung, F. and Wong, O., "How poor planning leaves Hong Kong's new housing estates with inadequate infrastructure," *South China Morning Post*, 15 April, 2015, www.scmp.com/news/hong-kong/article/1761269/planning-Gap-blights-hong-kong-government-housing-ambitions, [accessed 4 September, 2016].
6 Yau, E., "Winners and losers from Link Reit's 2005 takeover of Hong Kong estate malls", *South China Morning Post*, 11 January, 2016, www.scmp.com/lifestyle/article/1899882/winners-and-losers-link-reits-2005-takeover-Hong-kong-estate-malls, [accessed 26 August 2016].

3

1 Corridor in Mei Ho House, a Mark II Block Type Housing in Shek Kip Mei (year unknown)
2 Kai Ching Estate, Kai Tak Development, Hong Kong (2015)
3 Recreation ground near Shek Kip Mei Estates
4 Choi Hung Estate, Wong Tai Sin, Kowloon East
5 Tin Fu Court, Tin Shui Wai, Hong Kong (2010)
6 "While economic and demographic changes mean low-density housing would be unrealistic, features such as mid-level green terraces, inter-spacing courtyards, wide and well-lit public corridors could be adopted to recreate the public area dynamic that is abundant in older-generation housing." Nighttime gathering at Wah Fu Estate, the first public housing estate in Hong Kong



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6

Dissolution of social webs aside, the absence of effective public space takes away the possibility for communities to organize protests from their own neighborhoods, the site of most of their grievances. In an age where media presence is essential in any public event (rightfully so or otherwise), having one's home as a backdrop for its protests plays an important part in the narrative of injustice, and to be robbed of such gestures is yet another blow to a citizen's political bargaining power.

Table 1 quantitative review — public & private space available to public housing estates residents in the past decades

	1950s	1960s – 1970s	1980s – 1990s	2000 – 2010s
Average Living Space (m^2/person)	2.23	3.25	7 – 10	12 – 13.1
Plot Ratio	3[8]	2 – 5	4 – 8	5 – 8

Undoubtedly an architect's contribution and expertise lie not within the quantitative but the qualitative development of housing. Consider the recent social upheavals in Hong Kong; there have been countless incidents — over lead in water supply, bid rigging, dismantling of local wet markets, privatization of parking spots at public estates — in recent years to show that the needs and injustices in the daily lives of ordinary citizens were outright dismissed. This weakening of the citizens' political power could be remedied through their physical environment. The local architect should look beyond fulfilling quantitative program requirements and providing adequate accommodation (the supply of which is undoubtedly beyond his or her control), and toward utilizing architecture as an instrument in the sociopolitical empowerment of ordinary citizens. In an age where action has proven to speak far louder than words, there is no better time for social architecture, or simply, a more considered design of public space in public housing.

Social architecture seeks not to directly intervene and solve the broad social issues at hand — the many long and tedious processes from which a building materializes would not permit an immediate solution anyway — but rather to provide, through formal designs and strategies, an environment in which inhabitants could feel enabled, connected and engaged in their own habitat. While divergent in its conclusion on the necessity of public space in a community's quality of life, social architecture follows Oscar Newman's defensible space theory in its belief that people have more agency in a space that they feels rights to.[9] There is nothing formally or ideologically radical in providing and designing evocative public spaces into housing. What separates social architecture as proposed here from existing architecture lies in its *prioritization* of public space and its qualitative relationship to the habitat it serves, and is the very domain in which architects could exercise their expertise and creativity, even within existing codes and vernacular. Conveniently, we need not look further than our humble own past for relevant examples of such social architecture.

→ Chan, S.M., "New housing strategy still gets it all wrong", tr. Alan Lee, *Hong Kong Economic Journal*, 22 December 2014, www.ejinsight.com/20141223-new-housing-strategy-still-gets-it-all-wrong/, [accessed 15 August 2016].
→ Deng, Y. et al., "Challenge-driven design for public housing: The case of Hong Kong", *Frontiers of Architectural Research*, vol. 5, issue 2., June 2016, p. 213 – 224. Available from ScienceDirect, [accessed 5 September, 2016].
→ Fung, C.W., "Neighbourhood Planning in Hong Kong's Public Housing Estates", Master's Thesis, University of Hong Kong, 1995.
→ Fung, F. and Wong, O., "How poor planning leaves Hong Kong's new housing estates with inadequate infrastructure," *South China Morning Post*, 15 April, 2015, www.scmp.com/news/hong-kong/article/1761269/planning-gap-blights-hong-kong-government-housing-ambitions, [accessed 4 September, 2016].
→ Hatuka, T., "Designing protests in urban public space", *Metropolitics*, 14 September 2011, www.metropolitiques.eu/Designing-Protests-in- Urban-Public.html, [accessed 29 August 2016].
→ Ho, A., "The unlivable dwellings in Hong Kong and the minimum living space", *Hong Kong Free Press*, 27 July 2015, www.hongkongfp.com/2015/07/27he-unlivable-dwellings-in-hong-kong-and-the-minimum-living-space, [accessed 20 August 2016].
→ Law, E.C.W., "Neighbourhood and Building Forms - A Study Of The Hong Kong Public Housing Blocks", Master's Thesis, The University of British Columbia, 1998
→ Mahtab-uz-Zaman, Q.M., et al., "The Compact City of Hong Kong: A Sustainable Model for Asia?", in Jenks M. and Burgress R. (eds.), *The Compact Cities: Sustainable Urban Form for Developing Countries*, London, Spon Press, 2000, p.255 – 268.
→ Ng, E. and Wong, K.S., "Efficiency & Livability: Towards Sustainable Habitation in Hong Kong", *Hong Kong Housing Authority Conference 2003*, 2003.
→ Newman, O., *Creating Defensible Space*, U.S. Department of Housing and Urban Development, Office of Policy Development and Research, 1996.
→ Oxfam Hong Kong, *Research on the Living Conditions of Tenant Households Who Have Been on the Waiting List for Public Rental Housing for Over 3 Years*, 2013.
→ Planning Department, "Hong Kong Planning Standards and Guidelines", June 2016.

7 Fung, C.W., "Neighbourhood Planning in Hong Kong's Public Housing Estates", Master's Thesis, University of Hong Kong, 1995, p.36.
8 Mahtab-uz-Zaman, Q.M., et al., "The Compact City of Hong Kong: A Sustainable Model for Asia?", in Jenks M. and Burgress R. (eds.), *The Compact Cities: Sustainable Urban Form for Developing Countries*, London, Spon Press, 2000, p.255 – 268.
9 Newman, O., *Creating Defensible Space*, U.S. Department of Housing and Urban Development, Office of Policy Development and Research, 1996, p.17.

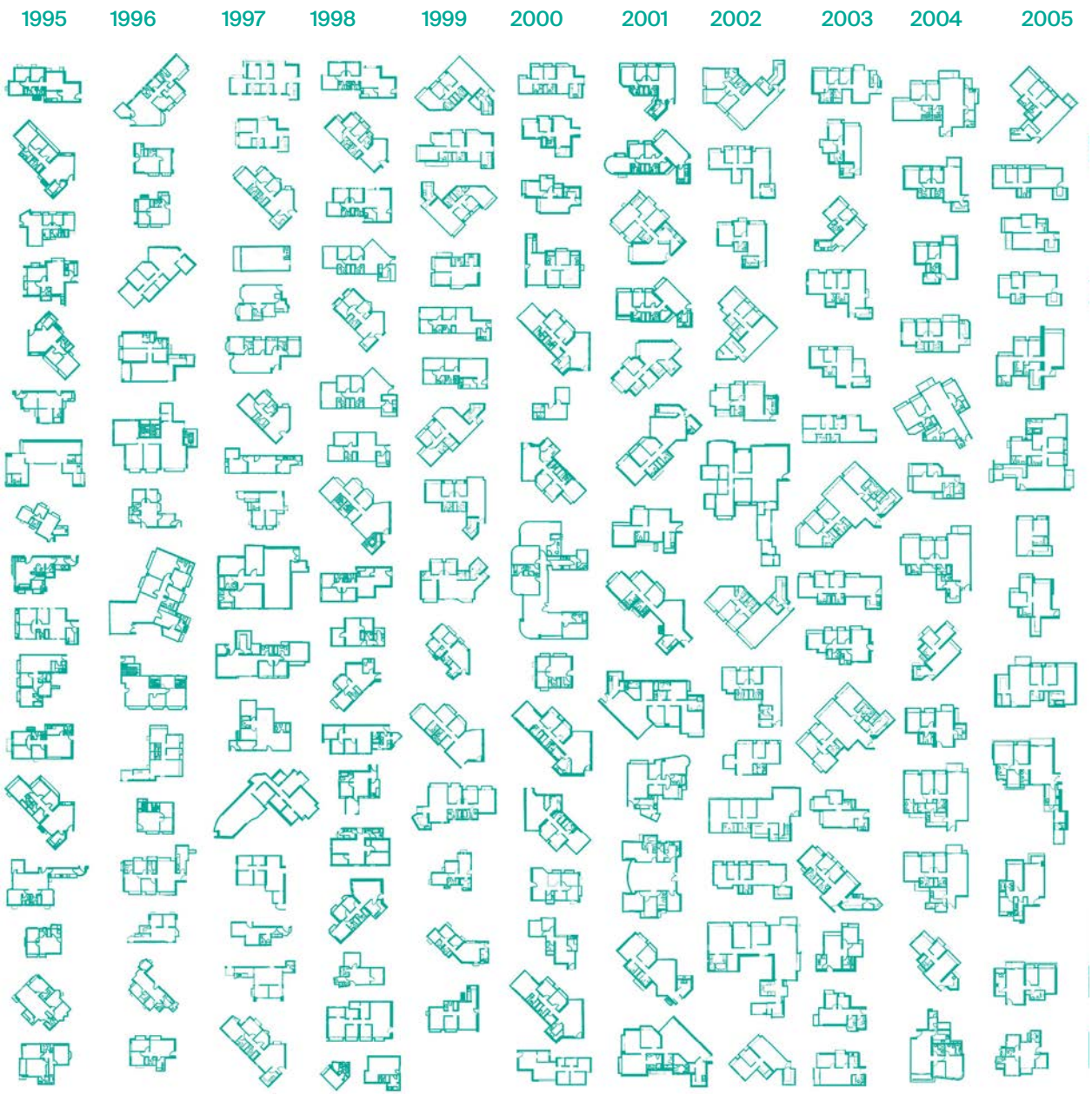
Spaces of Capital

資本的空間

The layout and size of private residential units are relatively more consistent in the early period of time. However, the deviation of flat sizes has grown more pronounced in recent years. The size of units completed from 2010 to 2015 varied much more than those built ten years before. Studio flats, a new residential typology to HK firstly appeared in 2010, are now getting more and more popular. 200 sq. ft. studio flat and 5000 sq. ft. luxury flat are selling with same unit price in the market. No more similarity in layout could be found in the recent projects.

The reason for this dramatic architectural design change is all about the distorted estate market. The decrease of the poor eligible in applying public housing together with the suspension of HOS housing pushed a new group of buyer with salary $11,000 — $20,000 into rigorous private market. In response to this group of demand with low affordability, the developers started providing tiny studio flats with lower selling price. Meanwhile, the Closer Economic Partnership Arrangement with the mainland China has attracted enormous hot capital to enter Hong Kong real estate. The myth of unstoppable rising unit price marks the investment value of Hong Kong private housing. Billionaire from China, international cooperation or investing bank is looking for large-scale profitable investment projects, resulting in the birth of super luxury private units.

Note to drawing:
The year stands for the year of completion of that residential project. In a year, newly completed residential projects with more than 2 towers sitting on a podium are chosen to be sampled to minimize the formal deformation caused by some special site constraints. Single tower with no obvious site constraints are chosen as well (e.g. Opus sitting on the hill alone). The flat repeated in highest frequency is chosen from the typical floor plan to represent the "typical residential unit" of that year.



2006
2007
2008
2009
2010
2011
2012
2013
2014
2015

Christian J. Lange / Jason F. Carlow

Cities of Repetition

重複的城市

The following is an excerpt from the forthcoming book, Cities of Repetition: Hong Kong's Private Housing Estates.

Housing is one of the most fundamental elements of urban growth and Hong Kong has for decades hosted some of the most intense built environments on the planet. The city's urbanization has produced unparalleled living conditions in terms of scale and density. As a socio-political microcosm, Hong Kong has been dealing with the impacts of hyper-dense urban environments since the mid-twentieth century. Due to lack of space, topographical constraints, historical and political conditions, and a high population density, the city has become an incubator for the development of mass housing models for high density living. Today, the common approach to mass housing in Hong Kong is based on reductive, standardized and profit-driven development strategies. Much of the city has been built with endless repetitive canons utilizing formulaic layouts and building designs. For better or worse, rapidly growing cities in East Asia and around the world have followed Hong Kong's model.

Throughout the 20th century, in Hong Kong and around the world, the prefabrication of standardized architectural elements enabled builders, governments and developers to increase the scale and pace of construction. This increase in construction efficiency was especially useful in times of need for social housing. During the influx of new residents to Hong Kong in waves throughout the mid-20th century, new high-rise housing types were invented and built all over Hong Kong, Kowloon and the New Territories. New social housing was built rapidly to safely accommodate thousands of new residents. The housing produced was tall, dense and homogeneous to house as many residents as possible as quickly. During recent decades in Hong Kong, as housing supply has increasingly relied upon the private sector, the strategy of mass standardization has shifted from social responsibility of government agencies to the pursuit of profit by real estate developers.

While the history and architecture of public housing has been well researched and documented, relatively little has been done to trace the evolution of Hong Kong's private housing estates. It is quite remarkable that in most places in the world, when housing is left to the private sector, the results are diverse. When mass housing is left to the private sector in Hong Kong the resultant architecture has proven to be highly formulaic.

The quality and quantity of space in a typical apartment flat in one of Hong Kong's privately developed estates has been significantly reduced in recent decades by the profit-driven nature of real estate development and attempts to maximize leasable or saleable floor area while minimizing costs. Hong Kong's restrictive building code and high land value has all but erased distinctions between tower blocks within and across large-scale housing estates. While public housing produced in Hong Kong since the 1950s has introduced many innovative models for mass housing that have evolved over time, privately-developed estates have almost entirely relied upon a singular building type and similar planning strategies even when they are designed by different architects and built by different development companies. Building policies and practices have led to standardized, code-compliant floor plans which are mirrored, copied, extruded and arrayed across sites to form thoroughly monotonous, overly repetitive urban environments.

As Hong Kong has become a model for high-density planning in rapidly developing mainland China and beyond, the wide-scale appropriation of architectural and urban standardization has a broad impact that threatens the quality and habitability of cities for huge residential populations for decades to come.

Cities of Repetition provides a comprehensive graphic documentation and analysis of the ten largest Hong Kong housing estates built by private developers from the late 1960s through the 2000s such as Mei Foo Sun Chuen, Taikoo Shing and Whampoa Garden. The original drawings and diagrams in this research project illustrate the ultra-dense, mass produced, highly repetitive built environments in which tens of thousands of Hong Kong residents live. Drawings and plans not only display the immense scale of the housing estates within the city, but present the hundreds of similarly planned housing units and their subtle differences. Detailed analyses compare statistical information to show how the planning of these massive estates has evolved over the past decades to efficiently conform to building regulations and produce huge profits. Original photographs and models reveal the spatial realities of living in some of the most densely populated, urban environments ever built.

We hope that our work allows architects, planners, policy makers, developers and the general public to better understand the benefits and drawbacks of serial planning and standardization of the built environment. While there are many positive aspects of Hong Kong's housing estates, including remarkable urban density and economic viability for production, new building codes that allow for and encourage variation and heterogeneity for mass housing developments must be developed and implemented if cities of the future are to provide humane and diverse modes of housing.

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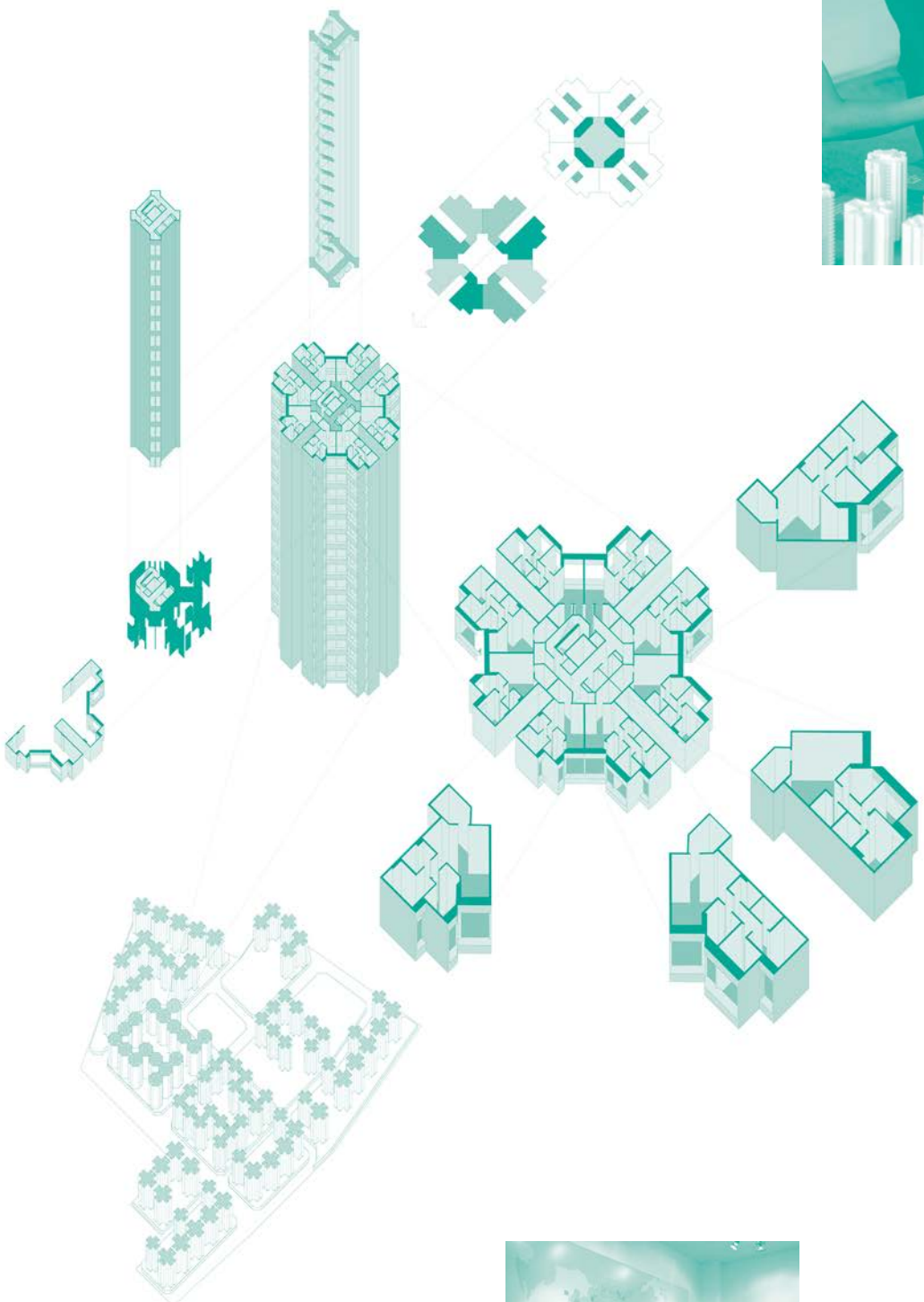

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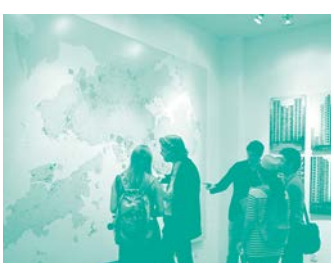


1 Cities of Repetition
Estate Components
2/3 Exhibition at the HKU
Shanghai Study Centre

Home Modification for low-income families in Hong Kong

改良香港低收入家居

1

2

The "Home Modification" programme working with the Society for Community Organization aims at improving the living conditions of low-income families in Hong Kong. We are working towards making decent study areas for children at home, helping them to perform better at school so that the family can escape a cycle of poverty.

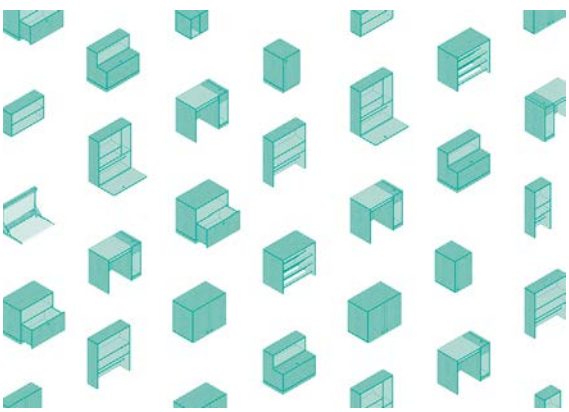
The homes of the families are small and crowded. In some cases a family of four or five will live in a room of 100 square-feet. Due to their poverty, many families have a habit of collecting material in the fear that they cannot afford things in the future, making the lack of space even worse. Although the families find ingenious ways to make their homes liveable by changing the use of a space throughout the day, this can be disruptive when the children are studying.

It might sound counter-intuitive to add more stuff to a cramped house, but we believe that by providing appropriate furniture, we could help the families to reorganise their space better. Many of the families live in subdivided homes in old tenement buildings with high ceilings. We saw potential to use this upper space in order to free up the lower living area, and create dedicated study spaces for the children.

Most families are living in transition, waiting to be allocated public housing, and moving from house to house in the meantime. Some approaches to improving living conditions, such as renovating run-down houses, or giving housing subsidies, risk the adverse effect of landlords increasing their rents, causing the low-income families to suffer more. We wished to avoid a situation where the landlord ends up benefiting from the scheme more than the family. By providing furniture that the family can take with them, we hope that the benefit of the programme can remain with them.

The furniture itself is a simple, standardised design made from blockwood. The families can reassemble it when moving to a new house and it is durable enough to survive several years. The simple construction means that it can be adapted in the future if the needs of the family change.

To date, DOMAT has worked with over 50 families in this programme and gain experience in space creation and social understanding of the situation involved.



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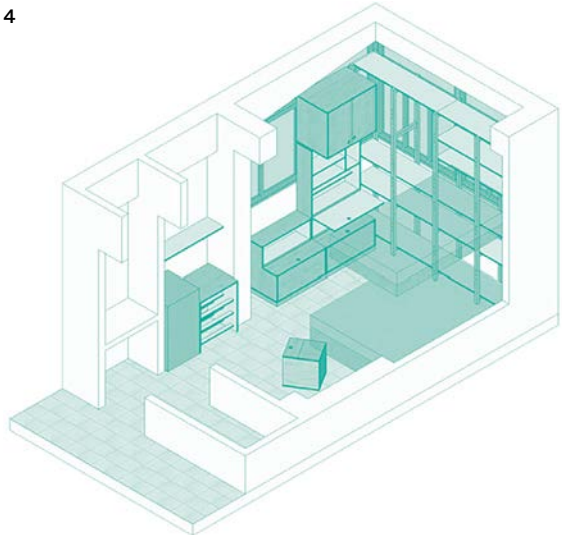

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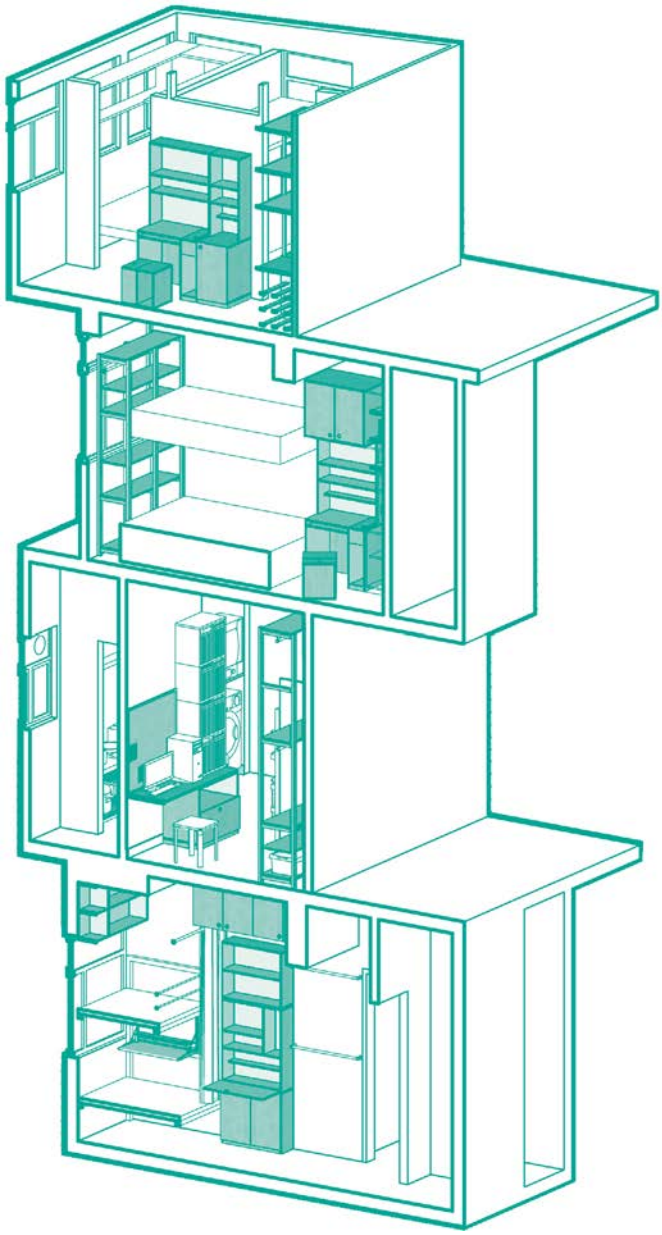

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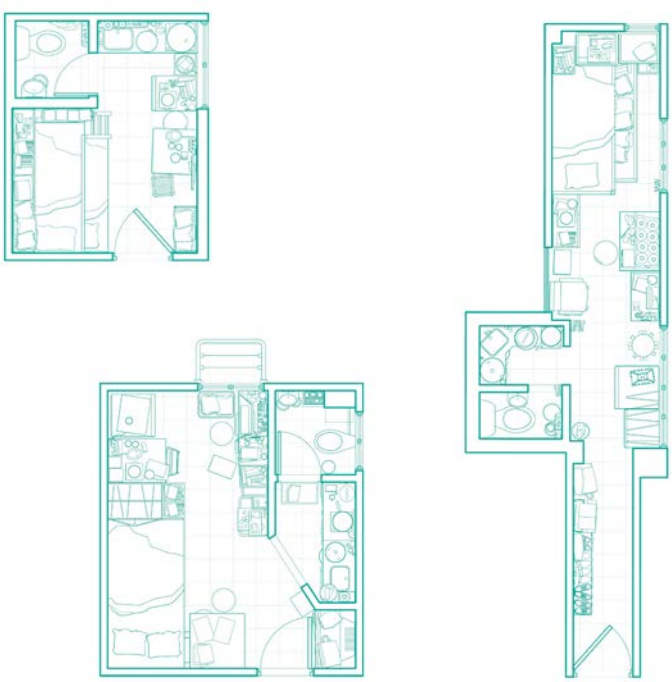
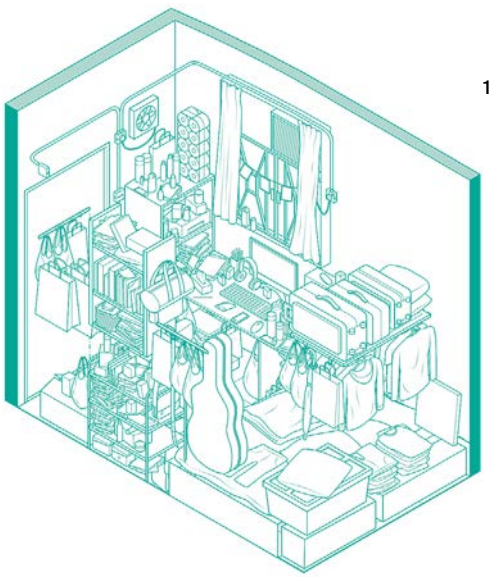


1 Before Modification
2 After Modification
3 Modular Furniture Concept
4 Furniture in Home
5 Furniture in the Homes
6 Layout Plans of some Sub-divided Units

A User-led In-situ Housing Upgrade Approach

用戶主導的住宅升級

Learning from Kowloon Walled City



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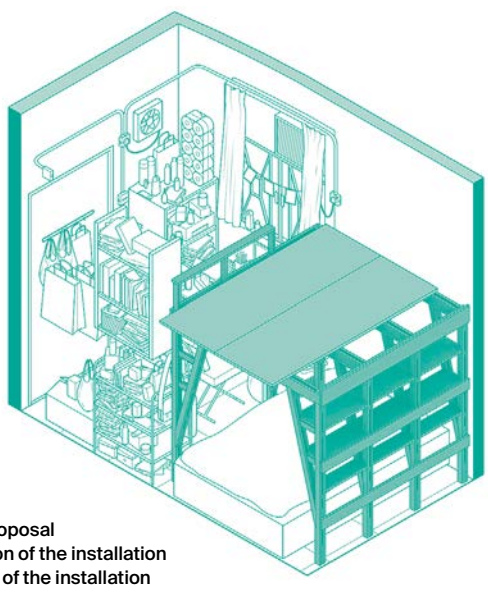

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1 Original site condition and proposal
2 before occupation of the installation
3 after occupation of the installation

Kowloon Walled City (KWC) was notorious for its substandard structure, poor security, and unbearable living environment. Although much feared and detested, legend has it that KWC once housed a peculiar but practical alternative ecology for the survival of Hong Kong's marginal group. Cheap housing and informal economies supported individuals who may not be able to survive elsewhere in the city. There were roof-top schools, clinics, dentals, churches, factories, grocery stores, and restaurants of all kinds. KWC remarkably housed a huge domestic food processing industry that exported delicacies to all over Hong Kong, such as noodles, fish balls, dumplings, roasted pigs, and ducks.[1] Due to the complexities in law enforcement and political pressure in the run-up to the 1997 handover, the 2.6 hectares of land was flattened in 1993, and 33,000 people were evacuated. The century-old eye-sore of the colonial government was gone, but the subaltern and marginal were not.

Nowadays there are around 200,000 people (or 88,000 families) in Hong Kong living in substandard shared spaces nowadays.[2] The median of living area per person was 4.5 m^2 way below the minimum standard of the Housing Authority and almost one-third of the actual area per person in existing public housing units.[3] The density in such condition is comparable to that within the KWC. These settlements, unlike the KWC, are mostly invisible to outsiders. These are the subdivided flats, colloquially known as "butchered rooms"[4] (劏房). The issue did not surface until fatal incidents occurred in similar structures in the 2010s, for example, the building collapse in Ma Tau Wai in 2010; the great fires in Mongkok in 2011 and Ngau Tau Kok in 2016. The issue of subdivided flats in rundown structures, which had been in a grey zone legally, was finally under public scrutiny. Six times the population of the KWC, now dwell in subdivided flats throughout Hong Kong. These invisible slums in Hong Kong accommodate the neediest groups of society.

Subdivided units can be commonly found in old buildings in urban areas, including residential towers, walk-up and composite buildings.[5] Composite buildings, accommodating a high density and diversity of subdivided flats, is the starting point of the study. Chungking Mansions (1961), which Gordon Mathews calls "the ghetto at the centre of the world"[6], is one of the most well-known examples. Other composite buildings in Hong Kong with intense informal networks include the New Lucky House in Jordan (1964), Kiu Kwan Mansions in North Point (1966) and I-Feng Mansions in To Kwa Wan (1972).[7] These buildings, mostly built between 1950s and 60s, are dilapidated, cheap in rent, centrally located, and usually accommodate a huge population. These qualities are all attractive to low income urban dwellers.

Over the decades, these buildings have produced some very unique informal ecologies within. Mirador Mansion (1959) on Nathan Road, is one of the examples. After almost 60 years of occupation and evolution, the intensity of program mixtures share surprising semblance with KWC. The domestic factories established in the 1960 s have been replaced with many subdivided flats and guesthouses, and a few clinics, offices, social clubs and religious venues. The internet café and guesthouses in the tower form business networks with the souvenir shops, travel agents, spas and restaurants in the podium. On the other hand, fabric dealers, accessories traders and workshops upstairs work with the tailor storefronts in the podium and logistics agents along the road to form a supply chain. A martial arts school, conducts classes on the rooftop in collaboration with guesthouses. Such invisible networks provide social and economic capital for the marginal make a living and support each other.

Learning from the composite and informal nature of KWC and Mirador Mansion, interpersonal networks and semi-legal practices left managerial lacunae for the poor to live on. It is evident that support networks and established communities, in addition to cheap rents and central locations, are essential in providing adequate economic support. While most of these qualities are unintentional, it is within the realm of design to discuss whether these qualities could be extended, re-created, or reinvented in existing or new housing projects.

3

Must housing solutions be provided through new buildings in new neighborhoods? Must low-cost housing be designed as an inferior mimicry of luxurious apartments? Can housing solution be incremental, in-situ and actively engaging with the specific future user?

With these questions in mind, the Urban Ecologies Design Lab (UEDL) launched a project in collaboration with Caritas Aberdeen Centre last year, which worked closely with selected low-income households in providing space-saving solutions for the improvement of interior environments in subdivided flats. For each project, unique design briefs were set together with the participating households and student volunteers. Utilizing digital design and fabrication tools at HKU, full-scale installation works were carried out on site.

In addition to the obvious density problem overdensity within subdivided flats, inhabitants of subdivided flats also suffered from extreme environmental conditions - suffocating damp air, absence of daylight, mildew that gives out toxins, substandard fire safety, and social and health issues due to super-high living density. Most householders have very long working hours and minimum holidays, and are on the waiting list for public housing. As these tenants have no clear contracts that define responsibilities with the owners, certain areas of these flats remain under-maintained — such as dilapidated wall finishes and persistent water seepage problems. In addition, since most of these households reused furniture collected on the street or gifted from friends and organizations, the furniture may not be of the best dimensions for the maximum use of space.

To provide for the households space-saving furniture with a moderate upgrade to the building quality, the project produced low-cost, easy-to-install prototypes in HKU, installed the tested prototypes in the subdivided flats and repainted the water-damaged walls with water sealants and paints. During the process, the households collaborated with the volunteers in painting, moving and installation. After a day of intense engagement and collaboration, the household, volunteers, and community partners had further built-up mutual trust and bonding. Eventually, the renovated flat yielded double the amount of bed-space, increased storage and improved wall-finish and lighting condition. While this prototype is in no way a universal solution to city's housing problem at large, it is a viable entry point for designers and professionals to engage in the informal networks that support underprivileged communities. Such user-led in-situ community upgrades approach for low-income housing is what can be arguably called the "Kowloon Walled City Model".

1 Girard, G., & Lambot, I. (2014). *City of Darkness: Revisited.* Chiddingfold: Watermark.

2 The survey only estimated the number of sub-divided units in private domestic or composite building built before 1991. In addition to the building age constraint, the actual amount of subdivided flats and occupants is larger since industrial, commercial, rural and public buildings were not considered in the survey. Census and Statistics Department. (2015). *Thematic Household Survey Report — Report No. 60 — Housing conditions of sub-divided units in Hong Kong.* www.censtatd.gov.hk/hkstat/sub/sp140.jsp?productCode=B1130201 [accessed 31st Aug 2016]

3 Minimum standard of living areas per person of the Housing Authority is 7m². Actual per person areas in existing public housing stock is 13m². Legislative Council (2013, June 5th). Press Release. LCQ18: Average living space per person in Hong Kong. www.info.gov.hk/gia/general/201306/05/P201306050278.htm [accessed 5th Sep 2016]

4 Tsao, C. (2012, August 4th). English Translation of Subdivided Flats. Apple Daily. http://hk.apple.nextmedia.com/supplement/columnist/art/20120804/16574600 [accessed 5th Sep 2016].

5 For the definition and development history of composite buildings, refer to the following published paper: Seng, E. (2014). "The City in a Building, Hong Kong c.1956 — 1966". In: A. Tostoes, J. S. Kimm & T. Kim (Eds.), *Expansion and Conflict — Proceedings of the 13th Docomomo International Conference Seoul* (pp.26 — 269). Seoul: Docomomo Korea.

6 Mathews, G. (2011). *Ghetto at the Center of the World: Chungking Mansions, Hong Kong.* Chicago: University of Chicago Press.

7 Researches on the adaptive re-use, social and urban implications of composite buildings in Hong Kong is ongoing in the Architecture, Urbanism, and the Humanities Initiative at the University of Hong Kong under the research project titled "The City in a Building: Composite Buildings in Hong Kong, 1950s — 1970s" directed by Dr. Eunice Seng.

Beyond Hong Kong's Podium-tower model?

超越香港的塔樓群樓模式?

Housing Projects
in China and Singapore
中國和新加坡住宅

The following selected housing projects in China illustrate a variety of housing typologies including the tower, slab, courtyard, and sky-bridge. Supported by both private developers and the public housing authorities, these notable projects reinterpreted issues of design ranging from: communal living, vernacular dwelling tradition and landscape by Urbanus; modular façade, energy conservation and sustainable concepts by Baumschlager Eberle Architects; as well as the notion of an elevated pedestrian link forming three-dimensional public spaces by Steven Holl Architects.

Looking around Asia beyond Hong Kong and China, architects, developers and authorities in cities like Singapore, Taiwan and Korea are all persisting with design efforts to generate innovations on housing for their cities. Well known examples include Singapore's 50-storey public housing project Pinnacle@Duxton, noted for its continuous rooftop Sky Garden, as well as a series of experimental high density housing projects by WOHA that creatively rethought vertical greening and elevated communal space for the tropical urban condition. WOHA's recent project SkyVille@Dawson realised their notion of Sky Village, while nearby, SDCA Architects' SkyTerrace@Dawson generated a staggered façade with its loft unit combinations.

The high-rise housing typology of Hong Kong had long been the development model for China since the opening up of its housing market in the 1980s. Through propagation by developers and architects, the Hong Kong model used to be considered as an advanced idea to learn from. After thirty years though, Hong Kong's extensive experience in commercial facilities may still be make it an expert However, the leading developers and authorities in China are already moving beyond the Hong Kong model with new design expertise from China and the globe.

Are we still leading design innovations for housing? After the podium-tower, plan extrusion or modular assemblage, are we only interested in housing management and construction standardization?

1

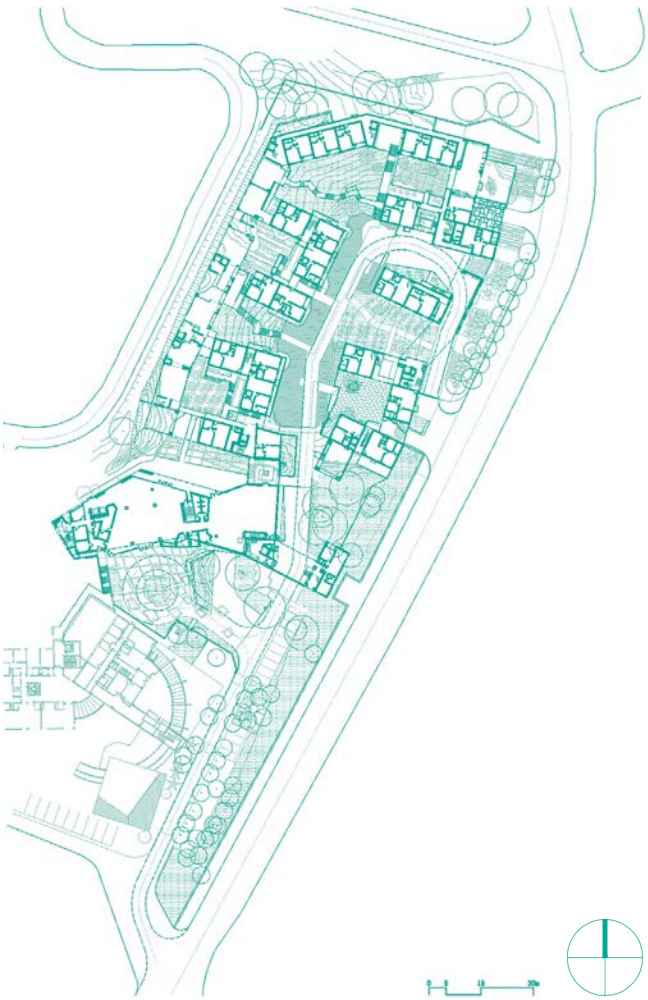
2

1 Skyville @ Dawson / WOHA
2 Pinnacle @ Duxton / ARC Studio
Photo Credit: Thomas Chung

Maillen Hotel & Apartment

美倫服務公寓

Location	Shekou, Nanshan District, Shenzhen
Client	China Merchants Real Estate Co. Ltd.
Year	2011



The project returns to fundamental ideas in Chinese living as expressed by the saying "hills outside hills, and gardens inside gardens," an idea referring to a continuous and occasionally repeating rhythm of space and form found in many traditional villages and mountainous landscapes. The relationship between nature and buildings is blurred in an attempt to create a new generation of urban living.

Located on the foot of the "south mountain", the site is terraced and sloped. The buildings gently grow out from the landscape, taking on the angular characteristic of the geography while offering ponds and courtyards to the residents. Views from the units extend to several smaller courtyards where bamboo, pine, and plum blossom can be found. In the center of the site, a modest walkway forms a link over the water, bridging the interconnected gardens.

PopMOMA

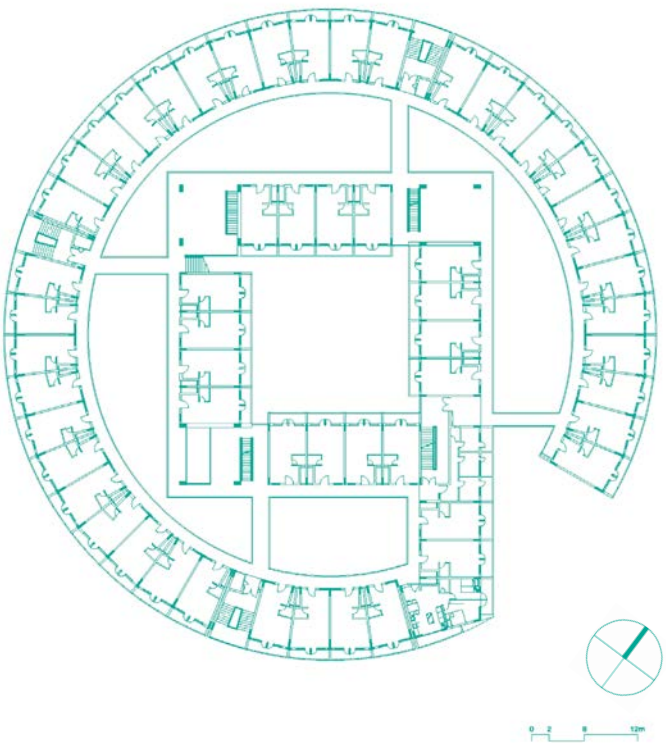
Location	Beijing
Client	Beijing Modern Real Estate Development Co. Ltd.
Year	2007

The master plan specified three high-rise blocks of great urban density to be built at a new traffic intersection on the perimeter of Beijing's inner city. This southward-facing complex occupies the northern rim of an area that comprises a whole series of new buildings. It forms a clean line parallel to the future main traffic artery. Above the first four floors devoted to shops, offices and service facilities, the towers spiral imposingly up into the sky for a further 31 or 24 storeys, with six apartments per floor. Any claim to a future-oriented construction concept postulates the durability of the building, which in turn makes the optimum use of energy the overriding consideration. The use of active ceilings for heating and cooling purposes as well as the controlled ventilation of the buildings are based on state-of-the-art technologies. In combination with a specially designed façade designed to enhance exposure to daylight a total of 388 apartments and 7,855 m² of office space are to be provided, all of which is to be extremely energy-efficient and offer a high standard of comfort. With its plain and unassuming modular structure the façade sets itself off agreeably from the more or less successful patchwork structures that surround it. The inner faces of the window openings, which are bevelled differently in accordance with the direction they are facing, are made of warm copper. Together with the glass-panel facing, through which a similar, somewhat darker hue shimmers, this lends the building a superior appearance of quiet elegance. It provides an attractive backdrop for the green enclave which it and the other new buildings have managed to preserve against the encroaching urban environment.

Tulou Collective Housing

土樓公舍

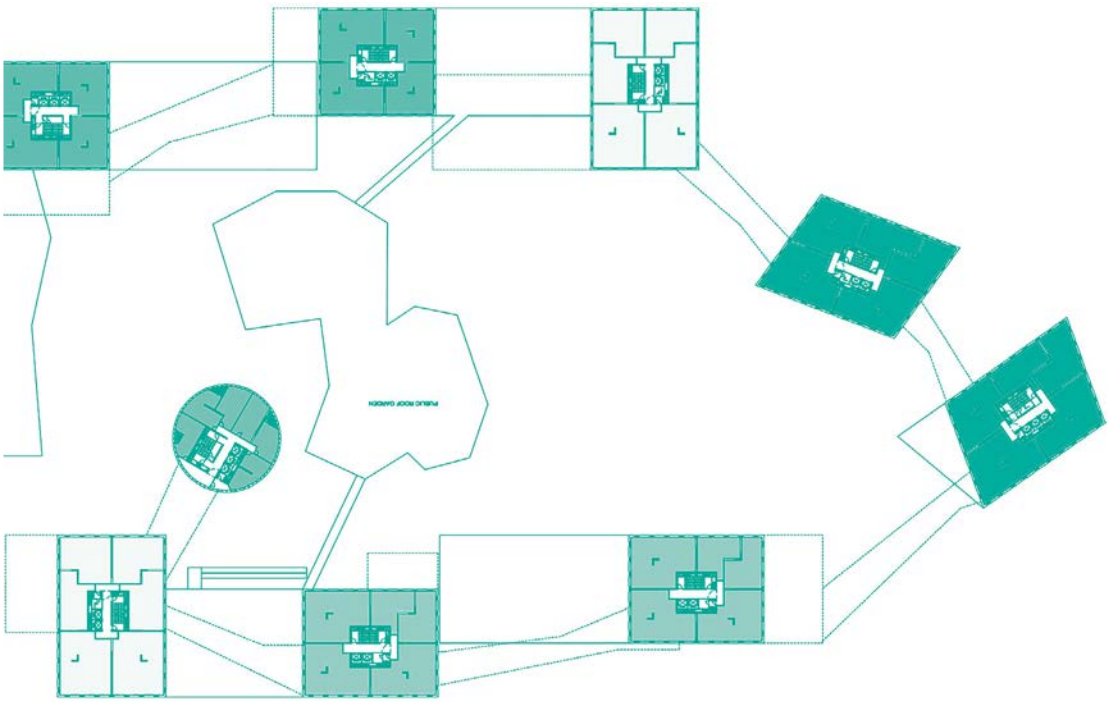
Location	Nanhai, Guangdong
Client	Shenzhen Vanke Real Estate Co., Ltd.
Year	2008



Tulou is a dwelling type unique to the the Hakka people. It is a communal residence between the city and the countryside, integrating living, storage, shopping, religion, and public entertainment into one single building entity. Traditional units in tulou are evenly laid out along its perimeter, like modern slab-style dormitory buildings, but with greater opportunities for social interaction. By introducing a “new tulou” to modern cities and by carefully experimenting its form and economy, one can transcend the conventional modular dwelling into urban design. The architects’ experiments explored ways to stitch the tulou within the existing urban fabric, which includes green areas, overpasses, expressways, and residual land left over by urbanization. The cost of residual sites is low due to incentives provided by the government; this is an important factor for the development of affordable housing. The close proximity of each tulou building helps insulate the users from the chaos and noise of the outside environment, while creating an intimate and comfortable environment inside. Integrating the living culture of traditional Hakka tulou buildings with affordable housing is not only an academic issue, but also implies a more important yet realistic social phenomenon.

Linked Hybrid

Location	Beijing
Client	Modern Green Development Co., Ltd. Beijing
Year	2009



The 220,000 m² pedestrian oriented Linked Hybrid complex, sited adjacent to the site of old city wall of Beijing, aims to counter the current urban developments in China by creating a new twenty-first century porous urban space, inviting and open to the public from every side. Filmic urban public space; around, over and through multifaceted spatial layers, as well as the many passages through the project, make the Linked Hybrid an "open city within a city". The project promotes interactive relations and encourages encounters in the public spaces that vary from commercial, residential, and educational to recreational. The entire complex is a three-dimensional urban space in which buildings on the ground, under the ground and over the ground are fused together.

The Pinnacle @ Duxton

Location	Central, Singapore
Client	Housing & Development Board, Singapore
Year	2009

Photo Credit: Thomas Chung

The Pinnacle @ Duxton is a competition winning design of 2002 that pioneered high-rise high-density public-housing form in Singapore's central business district.

Seven 50-storey blocks comprising of 1848 units, occupy only 2.5 ha of land. It is home to almost 8000 residents, thrice the density of a normal housing estate precinct. At a density of around 320,000 persons per square kilometre, this Superdensity project is an important demonstration of the liveability of high-rise high-density housing. Sky gardens reclaim land in the air by weaving the blocks with a vertical system of gardens on the 26th and 50th storey. This forms a powerful silhouette in Singapore's skyline that is central in the project's identity.

A raised new ground forming a park mediates between the private and public realm, containing a multi-layered system of programmes, activities and pathways enrich the communal surface. The seven towers are 90% prefabricated. The façade is composed with 10 modules creating a highly differentiated façade using an undifferentiated construction system.

SkyVille @ Dawson

Location	Dawson Singapore
Client	Housing & Development Board, Singapore
Year	2015

Photo Credit:
Patrick Bingham-Hall
Thomas Chung

The social housing project comprises of 960 homes, commissioned by the Housing & Development Board of Singapore, as project-based research into future affordable public housing. Each home is part of a Sky Village: 80 homes which share a naturally-ventilated and lit, covered community sky terrace and garden. On plan, the linked block is composed of 3 villages, each 11 storeys high, stacked vertically 4 times. The key innovation is the ungated, shared spaces interwoven through the cluster of towers from the ground to the roof that are conceived as "multiple ground levels" and designed to be part of daily life.

Every resident passes through, or look out of "their" high-rise village, via lobbies and bridges leading from the lifts to the flats, where they can greet their fellow villagers, see children playing, and neighbours chatting, look down into the planted sky terraces, or out to the landscape beyond. Other amenities include ground level Community Living Rooms, a Landscaped Park with 150m long bioswale, and a 24-hour public rooftop skypark. 3 plan variations of column and beam-free apartments allow diverse family sizes, lifestyles and future flexibility.

SkyVille @ Dawson combines social housing with progressive living, community and sustainability concepts, to serve as a model for urban high-amenity, high-density megastructures, as they are urgently needed in many Asian cities.

SkyTerrace @ Dawson

Location	Dawson, Singapore
Client	Housing & Development Board, Singapore
Year	2015
Awards	RIBA Award for International Excellence 2016

Photo Credit: Thomas Chung

Similar to its neighbour SkyVille @ Dawson, this project was commissioned by HDB to explore new possibilities in Singapore's public housing design. The design was informed by contemporary socio-cultural considerations and the immediate environmental context.

Composed of five towers ranging from 40 to 43 stories, SkyTerrace is linked by aerial green bridges and is seamlessly connected to the surrounding greenery of Alexandra Canal Park with lush landscaping present throughout the complex. The configuration of the housing modules at SkyTerrace recreates a vertical multi-generational village, allowing for extended families across several generations to occupy interconnected loft units.

The landscape architecture of SkyTerrace is notable for creating dedicated green spaces in which social interaction and rituals are encouraged against a backdrop of rich biodiversity. SkyTerrace is further distinguished by its ecologically self-sufficient design which includes overhanging gardens, replanted trees and shrubbery, bioswales and rooftop irrigation tanks.

The project was recently awarded the first RIBA Award for International Excellence 2016.

Thomas Tsang 曾慶豪

Made in Taiwan or Home in Taiwan

台灣製造或台灣住宅

JUT Foundation for Arts and Architecture 忠泰文化基金會

Taiwan was the home of manufacturing, production of textile and toys and bicycles - which have resettled from manufacturing work, or Original Equipment Manufacture (OEM), in the 1980s, later migrated from 1990s, stirred up from the Original Design manufacturing, or ODM, producing personal computer laptop and computer chips. The home of this exhibition consisted of three curators including renowned writer and curator Ching-Yueh Roan, Wei-Hsiung Chan, and Sotetsu Sha, who place themselves in mutual cooperation of 18 months. It started from mid-2015, to secure tenancy partnership among 29 teams of designers and architects, with 20 manufacturers from multinational conglomerate 3M to the local concrete company.

"Home" is the thematic focus of JUT Art Museum's inaugural exhibition, and its promises for future ahead, "HOME 2025." The project is privately supported by JUT Foundation for Arts and Architecture, Taiwan's most important foundation in the meeting of the real estate and artistic development, by bringing emerging young architects and designers who are gaining influence for their work within the region. The home of their labor is a penetrating and cross-disciplinary project that expands considerably the definition of what we mean, every consideration to new material and new technique. Architects and designers' are responsible to none, other than the manufacturer, which have agreed to place in the hands of the designers the full access and result of research on the products they intend to offer another value. The common conundrum over Taiwan's future identity and economy, experts have observed Taiwan face desperately needs to shift away from manufacturing production into the high-end services economy. The conclusion from this exhibitions, that architecture is not the same from past decade; this region has reached more open and complex system, have to be occupied and worked with, rather than simplified into unifying vision. Even low-tech manufacturing can foster in the creative and agile economy where automation has to affect the job market from small to large production, by accommodating to changes, conditions and conceptions, promotes the endless possibilities between architecture and art and culture, both experimentally and practically.

The importance of this process remains the experience of architects and designers of Home 2025, are the direct access and resources to manufacturers. In which possible way how their solutions of each problem, poses from practical assistance to the poetic resolutions, to search for a home in which promise for future in the midst of complexities and contradictions in architecture facing ahead. The program featured six major themes: "A home where the sky meets the sea: a Tai-wanderful architecture perspective;" "One with the planet: do green and live green;" "Leave you never: a new breed of homes for public shares and private musings;" "Adapting to cope: a treasure chest of new living and thinking;" "Beyond smart home solutions: Comfort- and safety-first homefront applications;" and "Sense and Sensibility: Home for emotional recharge and reset."

The curators ponder what the past, the present, and future, in the unsettling dynamic of our time, while 2025 is not considerably long, rather served a reasonable and realistic time frame, these commissioned can be conceivable, within reason, permitted to so. The 30 projects realized into large scale prototype, speculative scaled models, and renderings / photographs to conceptualize the shape and form, visions of home, and create, to find at least enough of an answer to give some directions to current thinking on the matter of home. It is understood and accepted as an attempt not merely as a conceptual preview, but to assist in giving some directions to the creative collaboration on housing being done by emerging architects and designers. By expanding manufacturers whose marriage objective is to develop the right house, housing, and home, these collaborations give the right of occupation to broaden the region's diverse identities of craft.

Oct. 22nd , 2016 — Jan. 15th, 2017
JUT Foundation for Arts and Architecture,
JUT Art Museum
Curator: Ching-Yueh Roan, Wei-Hsiung Chan and Sotetsu Sha
No.178, Sec. 3, Civic Blvd., Da' an Dist., Taipei City
www.home2025.org.tw
Predicting the future.

1

2

3

1 D-House / Wei Tseng, Chao-Hsun Lin, Ming-Jui Hsu
2 HOME 2025 – Zone A
3 Plug-In Village / Xuan-Cheng Chen
4 House Block / Wei Fang

4

Platforms
平台

HKIA Innovative Youth Housing Design Competition and Construction

香港建築師學會創意青年住屋設計比賽

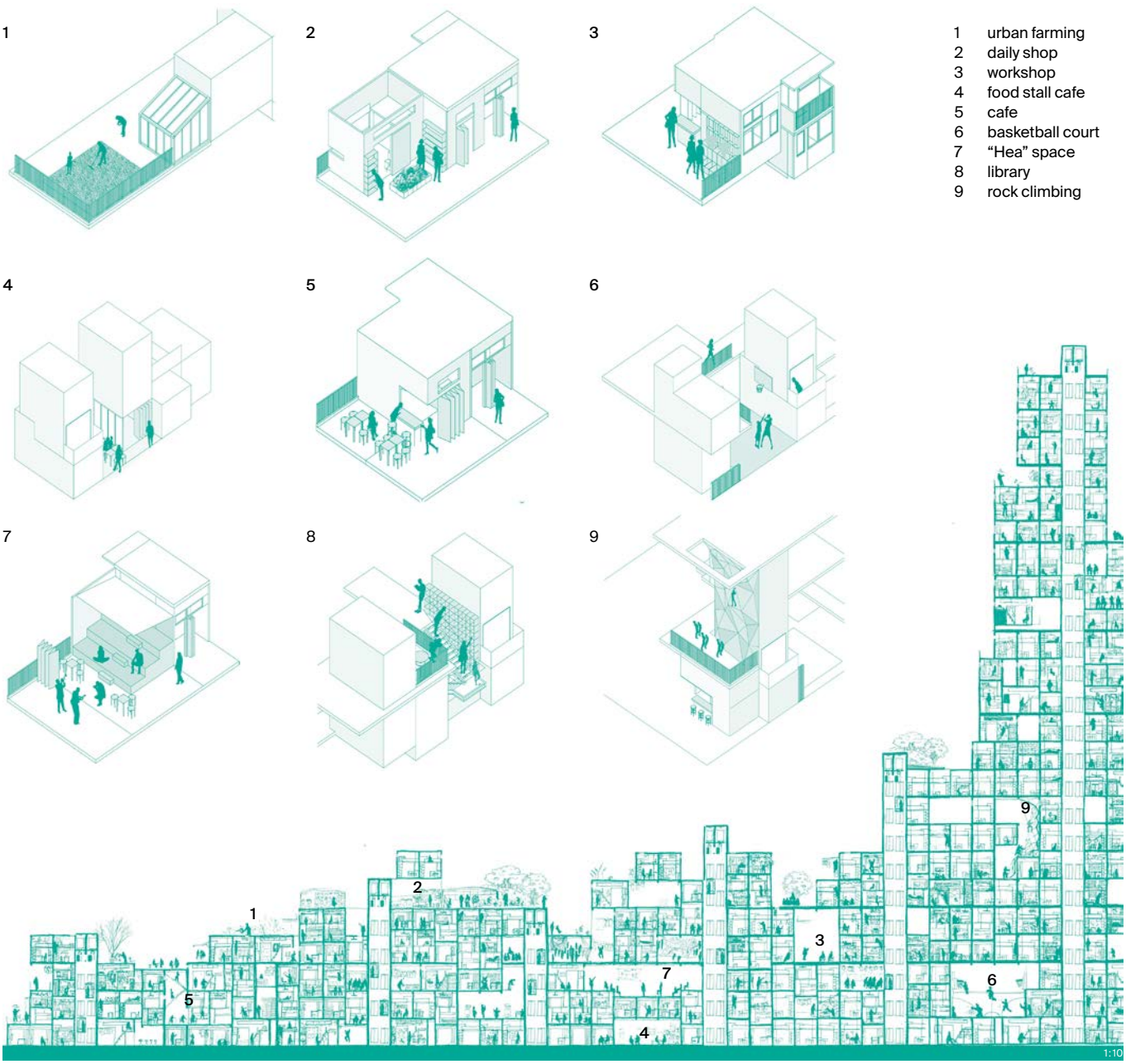
Organised by The Hong Kong Institute of Architects and supported by the Hong Kong Federation of Youth Groups, with the sponsor from Hong Kong Housing Society, the Innovation Youth Housing Design Competition and Construction started in June 2016, with an aim to explore youth housing design possibilities though an extensive end users' consultation and engagement process.

With a total of 53 teams of young architects (108 numbers in total) registered in the Competition, the Jury Panel selected 10 creative design methodology proposals by 10 teams in the first round, then 5 teams to carry on the design stage. The 5 teams then attended 7 youth-interflow sessions to learn about youth's requirements on youth housing. The process involved over 200 young people who contributed their ideas through discussion, sketching and model making process with the 5 architects teams.

The 5 design schemes consolidated the youths' ideas and expectations with individual spatial and aesthetics character, and provided visionary and innovative proposals.

The Pit Stop

In response to current trend of smaller living space in Hong Kong, The Pit Stop hopes to promote "co-living" lifestyle by breaking the boundaries of the conventional residential flats. Different from the "Cake Towers", clubhouses and communal spaces are distributed among the units to create a vibrant neighbourhood. Young people could extend their living space into the corridors by operable furniture. By sharing space, everyone can enjoy a bigger "pitstop".



1 urban farming
2 daily shop
3 workshop
4 food stall cafe
5 cafe
6 basketball court
7 "Hea" space
8 library
9 rock climbing

Wing Yi Hui / Lap Ming Wong

1/2

½ does not believe in the finality of a living space. In an attempt to explore the duality of *Basic and Autonomy*, ½ hopes to release individual imaginations beyond definitions and boundaries. A new habitat of youth is emerged from the presence and mix of each and every spontaneous acts in the manifold territories of private and public realms. Our skyscraper could be just as exciting as a mountain.

Embracing the inevitable density and efficiency, we hope to gain by releasing ourselves from a given enclosure.

One should be able to walk their way up and down the building, be able to venture out into the "street" and wander to different floors and destinations. Emergence of a neighbourhood is induced by unexpected happenings, variety of places and crowds of people.

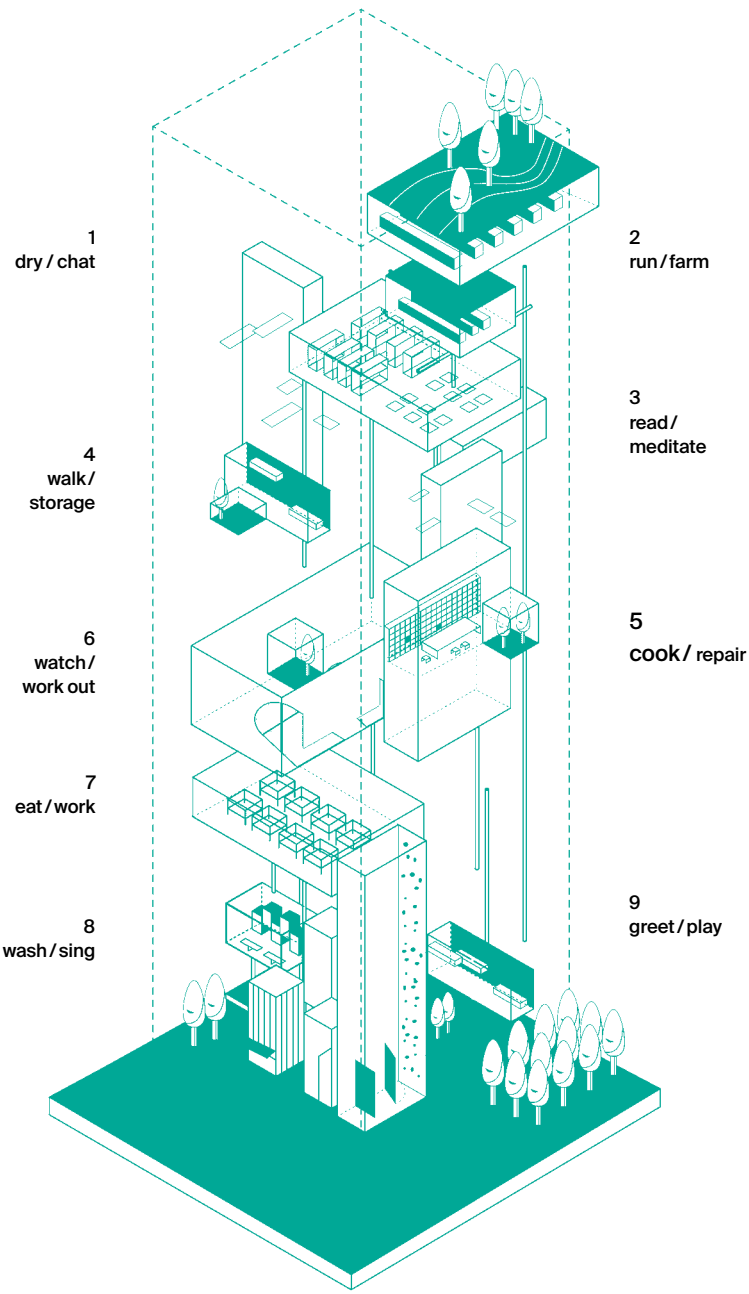
Fine and intimate degrees of control in openings is explored through the layering of various thresholds, the public and private realms could be formulated according to the their needs and emotions.

Given the exceptional ceiling height, this "empty space" offers a versatile arena for the youth to create whatever they want to fulfill their desire and aspirations. We believe the power to create is highest at this time of life.

Alan Cheung / Jessie Lau / Sarah Mui

Co — Exist micro-metropolitan living

Co-Exist brings on the vision that shared living is the future need. The proposal explores the possibility with a micro-metropolitan approach of living where disturbance and interaction can be encouraged by sliding partitions, introducing a new definition of private and semi-private space. Co-Exist treasures the diversity in youth and introduces flexible and multifunctional spaces with duality for stimulating intersections of the youth minds.



May Duality be your Intersection.

A Community that
embraces cross-function and
encourages duality.
Let your inspiration begin.

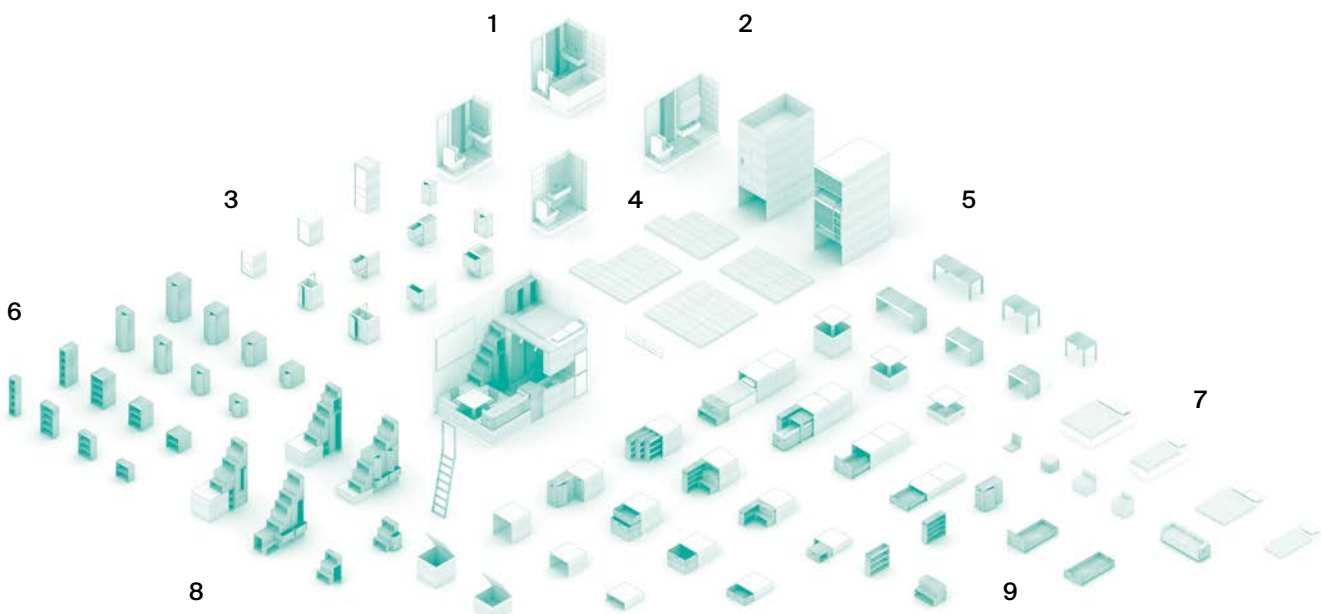
1 Staircase Core cum Drying
2 Rooftop cum Farm
3 Library cum Meditation
4 Corridor cum Storage
5 Shared Kitchen cum Event Space
6 Sports Hall cum Cinema
7 Cafe cum Co-Working
8 Laundry cum Band Room
9 Lobby cum Game Room

Javian Tang / Derrick To / Tsoi Wai Kuen / Edmond Wong / Wyan Yeung / Angus Yip

House of Choice

Each individual may have a very different living style, and a singular housing design, no matter how perfect, will never be enough to fulfill a wide spectrum of personalities. Instead, by designing a series of modular building components that offer an optimized array of possibilities, House of Choice hopes that each youth can assemble their own dream house, personalized to their own needs. The future of design should be one that is bespoke, that can be tailored to accommodate every unique personality.

1 bathrooms
2 sleeping capsules
3 kitchen fittings
4 mezzanine slabs
5 working tables & desks
6 cupboards & shelves
7 beds & mattresses
8 staircase storage
9 raised floor storage



A Collaborative Youth Housing

Driven by the design motive “Interaction”, the architecture of the communal space aimed to act as a vessel to promote “face-to-face” communication between youths as well as a communal platform to connect the youth housing with the surrounding community.

The architecture form began with a simple rectangle of the given 500 m² and was subtly evolved through the forces by the natural elements and the idea of the stepping communal platforms.

No Unit is Permanently Closed,
No Corridor is Pure Corridor,
This is A Collaborative Youth Housing.

Viewing Hong Kong as both insider and outsider

Review on *Hong Kong Architecture 1945—2015: From Colonial to Global* by Charlie Xue
書評: 香港建築: 1945—2015 薛求理著

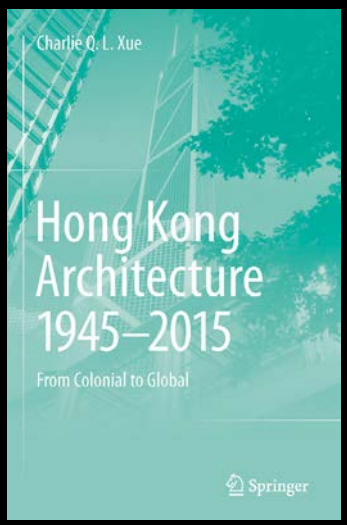
Hong Kong, the third largest financial center blended of Chinese and Western culture in the world, presents a high density and busy development of architecture with unique characteristics. Professor Charlie Qiuli Xue released a new English edition in 2016: *Hong Kong Architecture 1945—2015: from colonial to global.* The 337-page book expounds the developmental background, characteristics and causes of Hong Kong architecture at different stages, and sketches a picture of postwar recovery, economic takeoff and sustainable development after the sovereignty return.

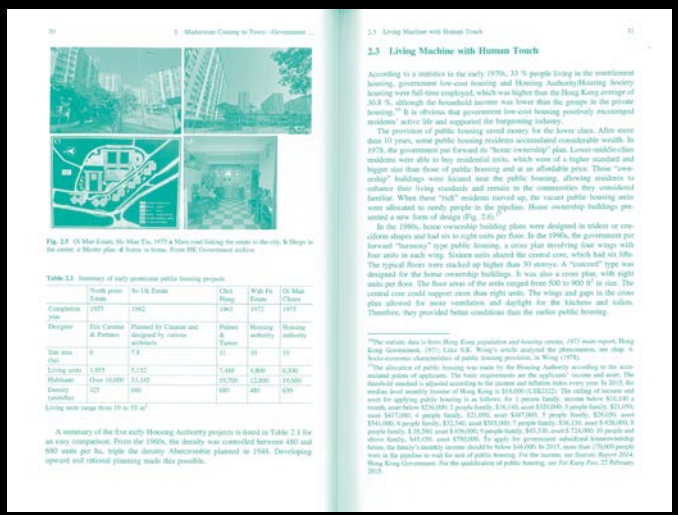
The author has searched and read a lot of historical documents, collected case photos and drawings, which are presented through a detailed Preface and 11 chapters. The book is divided into three parts. Chapters are arranged in chronological order, and then a discussion is carried out on the key points in each chapter. The first part starts with post-war reconstruction (mainly refer to the time frame of 1946—1971) and discusses the two main types of building that were built under the governmental channeling and leadership. The story of architects in the 1950s and landscape of design industry are unfolded. I am interested to read Chapter 2 about the public housing and public buildings. Chapter 4 about the implication of building regulation to design shows the author's deep understanding of Hong Kong practice. Why do some buildings have balcony, and why some have bay windows? The author reveals the strong influence of building regulations to the private building development.

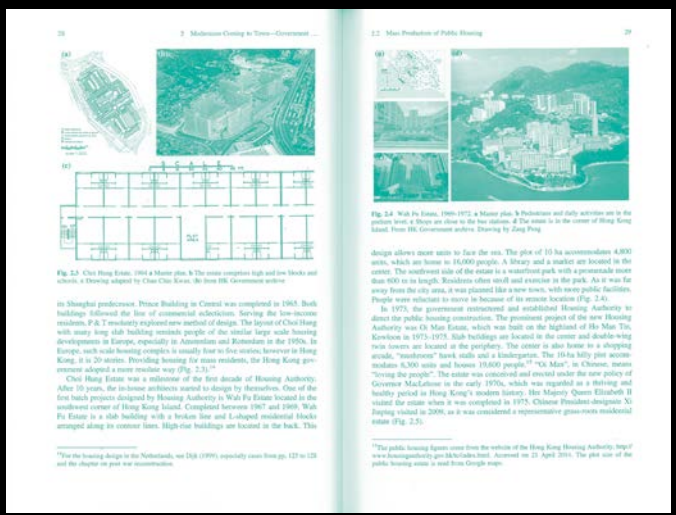
The second part focuses on the golden period during which Hong Kong developed from a dilapidated colony into an international metropolis. Accompanied to this transition, many new types of building emerged in the city, like shopping mall, bank and corporate headquarters, airport and TOD projects. When describing these glamorous buildings, the author repeatedly points out the intangible principles of capitalist machine. To catch up the characteristics of the high-density city, the author particularly sets a chapter on "rail village and mega structure"—the two types well integrated along the railway of Hong Kong and providing convenient homes for millions of people.
The third part primarily introduces new trends of architectural development in the 21st century, such as frequent public participation, awareness of the sustainability and a louder call for rational planning, heritage conservation and environmental protection.

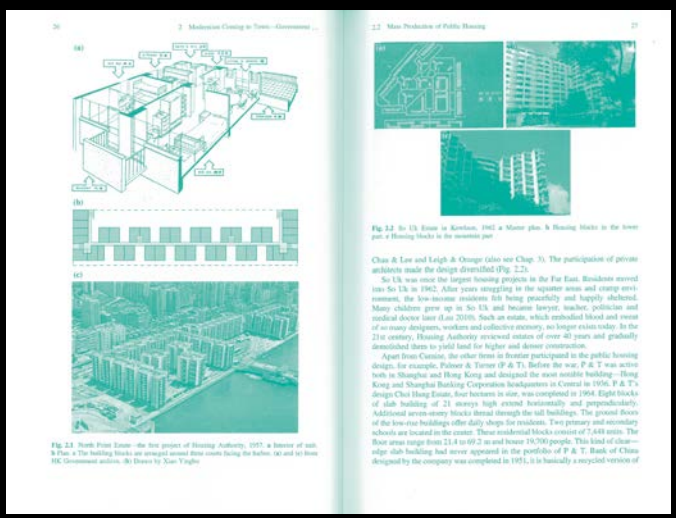
When thinking of architecture, we should reflect more on the relationship between man and various context and background. Architecture is a carrier. For instance, it links itself to human demand in the essence of life in accordance with outside conditions, such as society, politics and economy. This arouses my reflection. For example, it is undoubtedly a progress of times that public housing type evolved and made housing design standardization a reality in Hong Kong. But I also worry about whether standardization will kill the neighborhood culture. Xue's book praises the public housing and machine aesthetics, but does not comment its drawbacks.

In this book, relevant institutions, scholars and architects are interviewed. They bring out the precious stories and affective humanistic feelings behind architecture. I am impressed by the depth of the materials and analysis. The chapters on building regulations and TOD rail village embody the author and his team's research outcomes for years. As Xue says *"From public housing to private housing, from shanty towns to rail villages, the last 70 years have seen a wide range of building types and progress."*(p. xv). At the end of each chapter, Xue describes his personal encounter with the particular Hong Kong environment—public housing, private housing, seven renowned senior architects. We expect more new written works of Hong Kong architecture emerging.









Charlie Q.L. Xue.
Hong Kong Architecture
1945 – 2015:
From Colonial to Global.
Singapore: Springer, 2016.
xxix + 337 pages,
ISBN: 978-981-10-1003-3

60th

HKIA

Anniversary

Events 活動

2015

21 Nov
香港建築師學會 2015 周年晚宴暨 60 周年誌慶啟動儀式
HKIA Annual Dinner 2015 — Kick off ceremony of HKIA 60 th Anniversary

19 Dec
Lighting Ceremony
香港青年協會:「香港聖誕樹」(由香港建築師學會會員設計)
HKFYG: Hong Kong Christmas Tree (designed by HKIA Members)

2016

5 Jan
香港建築師學會 60 周年傳媒午餐會
HKIA 60 th Anniversary Media Luncheon

11 Dec — 28 Feb
港深城市/建築雙城雙年展 2015 (香港)
主題: 2050 活在我城
Bi-City Biennale of Urbanism \ Architecture 2015 (UABB)
Theme: Visions 2050 — Lifestyle and the City

24 Feb
第十二屆聯合專業高爾夫球錦標賽
The RSCP 12 th Joint Professional Golf Tournament

25 Feb
香港建築師學會新春酒會 2016
HKIA Spring Reception 2016

16 Apr
香港建築師學會運動及家庭同樂日 2016
HKIA Sports and Family Day 2016

26 — 27 May
威尼斯國際建築雙年展 2016 香港展覽
(威尼斯國際建築雙年展香港回應展將於 2017 年首季舉行)
Venice Biennale International Architecture Exhibition 2016 (VB) — Hong Kong Exhibition
(Response Exhibition in Hong Kong will be held in first quarter in 2017)

8 — 12 Jun
香港建築師學會六十周年紀念二零一五年年獎頒獎暨展覽
The Hong Kong Institute of Architects 60th Anniversary Annual Awards 2015 Prize Presentation & Exhibition

8 Jul — 4 Aug
香港建築師學會 60 周年呈獻:「築」x「電」之旅
HKIA 60 th Anniversary Presents: HKIA Tram Tour

10 Sep — 7 Oct
築.自室 2 之「家 — 城 ÷」
Reveal 2 Exhibition — For the City. For the Community : + - x ÷

25 Sep — 1 Oct
第十七屆亞洲建築師協會週年大會
17 th Asian Congress of Architects (ACA 17)

12 Nov
恒基兆業地產集團贊助: 香港建築師學會 60 周年慶典舞會 2016
HKIA 60 th Anniversary Ball 2016 — Blossoming · 60 Years of Architecture, supported by Henderson Land Group

12 Nov
《香港建築師學會 60 周年紀念特刊》發行
Launching of "The HKIA 60 th Anniversary Commemorative Book"

12 Nov
《筆生建築》發行
Launching of "筆生建築"

26 — 27 Nov + 3 Dec
香港建築學會 60 周年呈獻:【築動香港】系列講座 – 筆生建築 (與建築師作家對談)
HKIA 60 th Anniversary Presents: Public Lecture for Community

Throughout the whole year

→ HKIA Architect Community Project Fund
建築師社區項目基金

→ Innovative Youth Housing Design Competition and Construction
創意青年住屋設計比賽

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Occupy Housing