



O F A P

亞太家庭組織

Special Consultative Status with the United Nations Economic Social Council .

Opinion on Public Survey

“Strategy for the development of social housing”

(2011 – 2020)

<http://www.ihm.gov.mo>



Preliminary Report

1. Introduction

We are grateful for the opportunity to partake in the public consultation, to allow us to contribute as specialists in matters relating to the family and the core sphere of family development which the home represents.

As a result of the short period of the consultation, a mere two months, and the lack of graphic support documents (examples, plans and building sections for public housing), our contribution and suggestions will be limited.

Nonetheless, we are committed to studying and bettering the environment of families in Macau, in the Asia-Pacific region and in the world, as an observer member entity of the United Nations.

2. Principles and fundamental concepts of the housing

The household in which we live is the first environment in which the human being learns and develops in a natural way, in the heart of a family and in an environment that is comfortable which we call a home.

The model of housing that we choose today will, in large part, define the model of the citizen of the future, as housing is inevitably a means through which the family is educated and formed or, in the contrary, de-formed and configured.

The three pillars of social stability are:

- a) Food and nutrition (survival);
- b) Work and employment (sustainability);
- c) Home (family, comfort, social peace),

The best of these conditions results in the greater social harmony. The Chinese family in particular understands the concept of extended family, including three generations that support each mutually. It is only natural that the first generation, given its experience and more available free time, supports the education of third generation descendents (the youngest), freeing up the second generation for professional activities and career pursuits. This three generation model, living side by side, has proven extremely effective as, not only does it eliminate or reduce the need to employ persons external to the family to manage domestic matters, but it also reduces the economic and human resource investments of the State, and society in general. The three generation model enables the natural development of society, in mutual respect and caring for all its members.

This is the model that best corresponds and facilitates the concept of ‘Aging in Place’ (the ability to live in one’s own home and community safely, independently, and comfortably, regardless of age, income, or ability level (Wikipedia).

“Aging in place, requires swimming in a bigger tank” (aginginplace.com). The elderly should not be considered as a useless or burdensome member of society, who is sedentary and awaits care from others but, in the contrary, should be kept occupied as much as possible with real responsibilities and in diverse family and social activities.

To this effect, there is a need for space that allows for these diverse activities: for example, facilities for physical exercise, reading areas, cooking, Tai-Chi, Majong, Chess, music therapy (group singing or karaoke). The public areas of buildings should allow for communal activities such as Chinese Opera, religious functions, topical medical examinations/consultations, swimming and games, and other ludic pursuits organized by the community. This is possible if the housing designs are flexible, as long as the structure permits flexible layouts as it happens, for example, in office buildings.

Old age may be the time for well-deserved rest, the golden age, etc, or the nightmare or purgatory of having to live alone amongst strangers in an environment that is not familiar, that will contribute to the isolation and unhappiness of the elderly. Accordingly, the present choice of model and type of housing shall affect the future profile of society in Macau, its happiness and harmony.

The quality of housing reflects in some way the quality/capacity of a person/family who lives in that space: “I think that when you invite a person to your home, you invite them to yourself.” – Oprah Winfrey (aginginplace.com)

A fundamental principle is to consider housing a right and fundamental need for the healthy development of the human being, and not only as an economic asset, pieces in market where sole objective is placed in the selling and offering the maximum number of “units”, instead of proportioning quality and functionality for extended families (3 generations). There are many studies exposing the influence of housing conditions on human behavior. Healthy living conditions helps to generate good citizens, while lower or bad housing conditions leads to depressive and crime ridden environments.

Housing should be planned for people and not the other way around, whereas people are “projected” into spaces that limits their dignity and freedoms, as is the case in prisons and make-shift refugee camps. Both Macau and Hong Kong have played a role as refugee cities from the Second World War to the beginning of the Deng Ziao Ping’s ‘Open Door Policy’, in the 1980’s. During this period, most citizens were born outside of Macau, but came from immigration of large numbers of political and economic refugees, and resulting in many areas of the city being occupied by makeshift housing (for example in the areas around the Avenida Colonel Mesquita, the Ilha Verde, the neighborhoods of Porto Interior, Ka Ho, etc).

3. Shifting the policy of quantity and reduced quality (emergency situations) into a policy of quality and dignity for the family, promoting social harmony

The policies of social housing in Hong Kong (from which Macau takes many ideas and formulas) and those of Singapore are practically identical in theory but not in practical and applied aspects, especially those quantitative.

However, the population of Hong Kong is often discontent and vocal about their problems while, in Singapore, residents are content. The reason behind this discrepancy is not only due to the high price of housing, but also the space or basic square footage available per unit. Today in Singapore, 95% of the population is a home owner (HDB flats) and there is no longer any housing built in the 'emergency' planning (small units) model. Housing is generally planned with areas over 75m² (seventy five square meters) and options with 3, 4, 5 rooms, alongside executive models, designed according to the needs of the population and with areas varying between 70 to 130m², have experienced a strong rise since the 1990's¹.



Singapore Real Estate and Public Housing (Punggol), both developments with quality of public and private spaces, landscaping, integrated sports/ leisure facilities, commercial and cultural spaces.

Another important aspect of Singapore's success is the regulation and control that the government imposes on housing market speculation, allowing for the protection of citizens, the city, the economy, the nation against national and international crises such as the current financial crises that is affecting the United States and Europe.

Once again, the example of Singapore is a good one because it uses efficient mechanisms to control speculation. For example, an investor from abroad must have a local partner to ensure the security and maintenance of apartments, making it easier to keep them 'lived-in' and avoiding the stigma of housing without inhabitants and inhabitants without housing. Buildings should be planned in a way

¹ http://en.wikipedia.org/wiki/Public_housing_in_Singapore



that allows for expansion, combining or dividing of apartments, adapting to the needs of families in which several generations may live side by side, or in adjoining floors (duplex), with the possibility of direct communication.

The priority in the last decades in Singapore has been to provide universal housing with dignity and quality, with good landscaping practices, leisure and sporting facilities, accessible commercial activity, allowing for a balance of social wellbeing, social pride and, moreover, enabling for the rising value of the real estate market.

Both in Hong Kong and in Singapore, the priority of social housing was to resolve urgent problems, supplying hundreds of thousands of families that lived in makeshift habitation with a real home. Planning has been oriented towards these pressing needs, such as that of housing the thousands of refugees and homeless after the Christmas fire of 1953, in the slum neighborhood of Shek Kip Mei. Although it has a different historical context, and a much smaller territory, Macau has simulated urban planning initiatives from Hong Kong, using models of high density housing, not only in luxury residences but also in economical and social estates.

In Hong Kong, a housing authority (HKHA) is responsible for the management of the Housing Estates, the prevention of squatting and for the promotion of housing policies. The authority operates the [Tenants Purchase Scheme](#), the [Home Ownership Scheme](#) and the Private Sector Participation Scheme.

The emergence of the Housing Society (HKHS) with its not-for-profit charitable goals of social development and promotion marked an important shift. The urgent housing problems were resolved and by the end of the 90's the government effectively ended all direct intervention in the residential market, correcting the abuses of the PRH (Public Renting Housing) through a moderate policy of privatization and home ownership (through the Home Ownership Scheme), followed by a PSPS (Private Sector Participation Scheme) and the introduction of a strategy of HPLS (Home Purchase Loan Scheme), with the purpose of promoting social stability (Chiu 1994), of these the BFS (Build for Sale Scheme) being the most stable.

The objective of this policy, both in Hong Kong and in Singapore, was to increase social stability and support for government. The policy resulted well in Singapore but not so in Hong Kong, in our opinion, because of the quality of housing available, whereas Singapore had an offer of more spacious quality apartments.



Social housing in Singapore, with generous interior dimensions and healthy exterior environments, with large green spaces and leisure facilities.

The problem with Hong Kong is that, in reality, there isn't a 'free market' in housing, due to the limited number of companies, a commercial elite, that can purchase land lots at the inflated prices presented in public auction, and thus fueling the government strategy of using land sales to support the public coffers. While in Macau the main source of government revenue is linked to the casino industry, there is no need to copy the Hong Kong model, created in colonial times.

Considering the limited land resources in Macau, real estate speculation should be more regulated, as it infringes on a basic need of citizens, a human right, and not a speculative asset for improvement of finances. Because of this speculative environment, the allowed 'free market' in real estate policy in Macau and Hong Kong has contributed to the social imbalance and the creation of effective 'ghetto' communities of the disenfranchised, which represents a policy contrary to those supported by the United Nations (State of the World Cities 2008/9 Harmonious Cities, UN-Habitat).

In Hong Kong, the benefits of the investment in real estate is a pillar of the economy, alongside being an international financial market and stock exchange. The pillar of the economy of Macau, and of the government's public finances, is not the real estate market but the gambling industry, tourism and a variety of service-based sectors. While the real estate market has a limited impact on the economy, it is important to consider the negative impact that the a 'cement jungle' in the territory's scarce space resources may have in quality of life of its residents, alongside the damage it may pose to gaming and tourism industries.



In case the government decides to adopt a similar strategy to that of Hong Kong, prioritising housing over other industries, it would be necessary to provide less land for the building of casinos, just as suggested in the original plan for COTAI, before the liberalization of the gambling market, where it was allocated the construction of 150,000 homes for local residents, 80,000 for non-permanent residents, in conjunction with schools, parks, sports facilities, hospital, day centres, market, etc (in Revista Macay 1998, special issue. P.7)

4. Investing in the quality, security, comfort and durability of housing, allowing for the growth and retirement (ageing in place) of all citizens

In terms of economic expenditure for the State, as well as healthy family life, the best concept to support is that of 'ageing in place', in a familiar location where the majority of a citizen's life has been lived.

The elderly should not live alone, as a great number, over 25% of which, will suffer from Alzheimer, dementia and/or physical impairments and reduced mobility, thus needed to live in communally supportive groups, with some additional care of nurses and medical professionals. Traditional 'nursing homes' are not effective, allowing for depression, insecurity and a strong sense of loneliness for those who have dedicated their lives for the good of the nation. It is already expected that China shall suffer from a similar population ageing rate as Japan, presently exposing a significantly grave prospect².

Academic studies undertaken in Japan reveal that the houses/ apartments of social housing constructed in the 1970's, with moveable walls and flexible space configuration, allowed residents to adapt to the needs of growing or declining family unit structures within the same space, without the need of procuring new housing that is effectively bigger or smaller in square footage. This is the case of the Tsurumaki 3 Housing Estate in Tama New Town, in the suburbs of Tokyo³ (image below).

² <http://www.stat.go.jp/english/data/handbook/c02cont.htm>

³ (JAABE, Journal of Asian Architecture and Building Engineering/November 2007.p 245-250. Kazunobu Minami, Aging Post Occupancy Evaluation of Layout Changes on Adaptable Housing)



Exemple of flexible housing, catering to family unit fluctuations (2 generations) from 1982 to 2005, in the Tsurumaki 3 Housing Estate. Key: M# (father and age); F# (mother and age); m# (son and age); f# (daughter and age).

The adaptability of the space allows for the ability to reconfigure, making it a very attractive system both for those living in this arrangement for decades, as well as those new to the Estate.

“Ageing in place” results in a better quality of life for the elderly community while, simultaneously reducing the government expenditure in social services. The following graph compares the evolution of government investment in elderly services in Japan with the steady ageing of the country’s population.

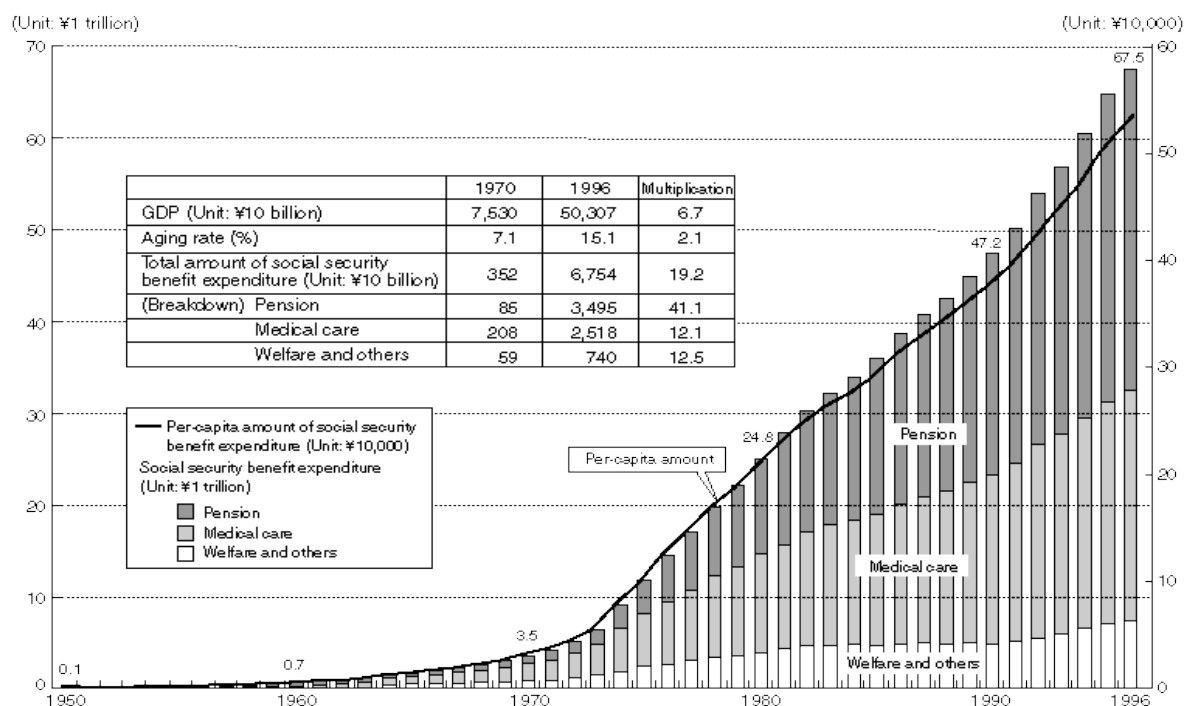


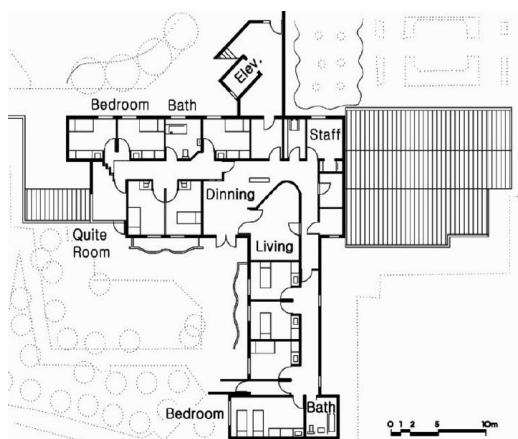
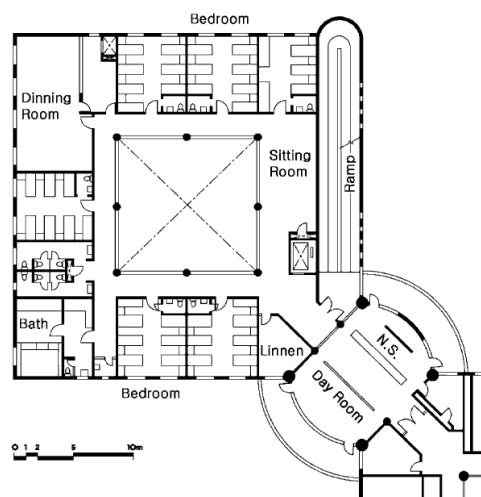
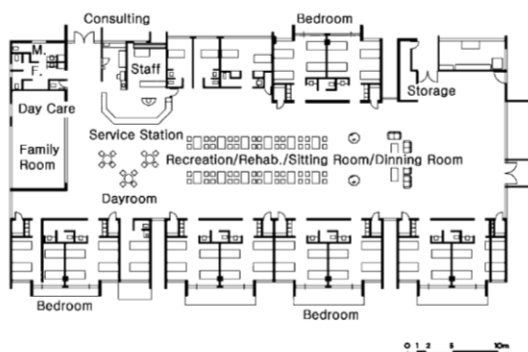
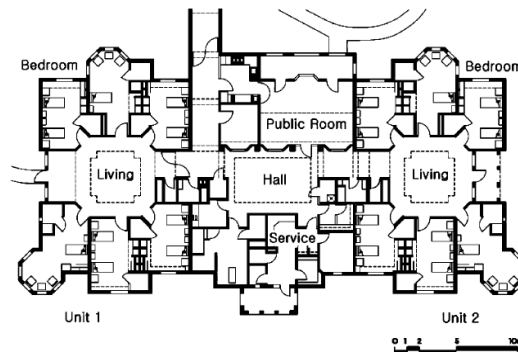
Figure: Social Security Expenditure, by the National Institute of Population and Social Security Research

The values expressed in the graph compare the government expenditure in social security (in trillions of Yen) with the growth of life expectancy, from 1950 to 1996. It should be noted that the current present figures are exponentially higher due to the falling birth rates, that would allow for a better balance of younger tax paying citizens that would offset the deficits.

For cases where there is little or no family support, in which medical assistance is needed, it is necessary to also develop special housing models that are additionally expensive for the government and families in special situations (as outlined below). The majority of public inquiries (JAABE) reveal a preference for ‘ageing in place’ models, in the habitual residency, as demonstrated in the following figure (JAABE, May 2005. Architectural Types of Residential Unit in Nursing Homes, by Soonjung Kwon and Kwango Kim. P 105-112)

Comparative map of different housing solutions for the elderly, in different countries

| Nation | Area per bed of a facility (m ² /Bed) | Area per bed of a residential unit (m ² /Bed) | Number of residential units in a nursing unit | Number of beds in a residential unit | Number of beds in a bedroom |
|---------|--|--|---|--------------------------------------|-----------------------------|
| U.S | 53.8 | 38.3 | 2.6 | 13.7 | 1.3 |
| U.K | 36.0 | 23.6 | 3.2 | 11.4 | 1.3 |
| Japan | 48.8 | 32.0 | 1.5 | 18.6 | 1.8 |
| Korea | 29.9 | 15.5 | 1.4 | 39.5 | 4.9 |
| Average | 43.7 | 28.4 | 1.8 | 22.6 | 2.5 |


Woodlands Nursing Home, U.K. 1995

Joonggye Nursing Home, Korea 1995

Care Home Sirai, Japan 1995

Parkvue Nursing Center, US 1995

5. Applying modern and scientific policies of integrated urban planning, instead of the short-term planning sector-based system

What differentiates a developed city and society with high quality of life and that of an underdeveloped city or society is the planning and models of sustainability.

After the Second World War, the majority of cities in Europe and Asia suffered from a state of complete ruin. Urban planning policies that addressed both the urgent housing needs, alongside infrastructure dedicated to education, sports and leisure, and cultural contributed to the success of countries that applied these overreaching long-term investments, in recovery and betterment of the human condition in individual and social terms.

In Asia, the example of Singapore exposes how a city of slums and high crime rates was converted into one of the greenest and most ‘advanced’ cities in Asia, even the world, due to the highest quality of planning models, and rigorous and effective implementation of a sustainable vision for urban social policies.

The key to success resides in the long-term planning process which requires time. Short-sighted solutions, without serious and scientific studies, accounting for social, environmental and urban impact, lead to the accumulation of more problems. Quality solutions require time, to allow for the participation and input of specialists in different fields, such as health, education, landscaping, sports, architecture, transports, infrastructure, etc. Unfortunately, the ‘fast food’ type models imported into Macau are not the best for health and development of families in the city.

In many occasions we have expressed our complete disposal, as experts in the development of family, to support this important issue of the design and planning of the physical environment of family housing.

Instead of destroying the green areas which serve as the city ‘lungs’, other resources should be considered, such as the conversion of abandoned or unused industrial buildings (considering that most of the industrial activity of Macau has ‘moved’ to Zhuhai where real estate and remuneration rates are more competitive). These buildings occupy large areas in the city, for example: many neighborhoods in the Areia Preta area, in the Bairro Iao On, in Taipa’s Pac On, in different zones still occupied by industrial facilities that have been abandoned for decades.

As promised by the government, and following the national and international recommendations, Macau would benefit from greater transparency in information and processes of use of modern methods in urban planning, including the needs for a GIS (Geographic Information System), a property information bank. The lack of reliable data regarding the occupation rates of buildings, function distribution (commercial, residential, public), etc make it very difficult to determine the present situation of land usage and future housing needs. The 3D plan of the city, created and supplied for public use by the Beijing Tsinghua Urban Planning & Design Institute and by the government of the EARM, should in fact be at the disposal of institutions with responsibility in Planning, instead of being used exclusively for private sector purposes.



Application of GIS and 3D models for public consultations and effective integrated planning, resulting in higher participation levels and better solutions.

6. Better integration of the urban grid into models of vertical density construction, avoiding the “fortress” effect, ventilation blocking and fluidity of pedestrian and landscaping environments

The old estate models, with high level podiums and towers that do not account for natural ventilation, should be avoided, as they impede on the fluidity of pedestrian life, as well as landscaping, tree plantation and green areas.

The model depicted in the following figure is, unfortunately, very common in Macau. This concept of large podiums in the ground level, topped by a monolithic tower, is a formula imported from Hong Kong. It is a model that creates urban fortresses that block the natural flow of air and ventilation, defeating any effective landscaping at pedestrian street level. Moreover, it poses additional affronts to pedestrian mobility, security and fire risk. All this is contrary to the concept of ecological sustainable city, and green building precepts, making it difficult to find worse models of social urban planning.

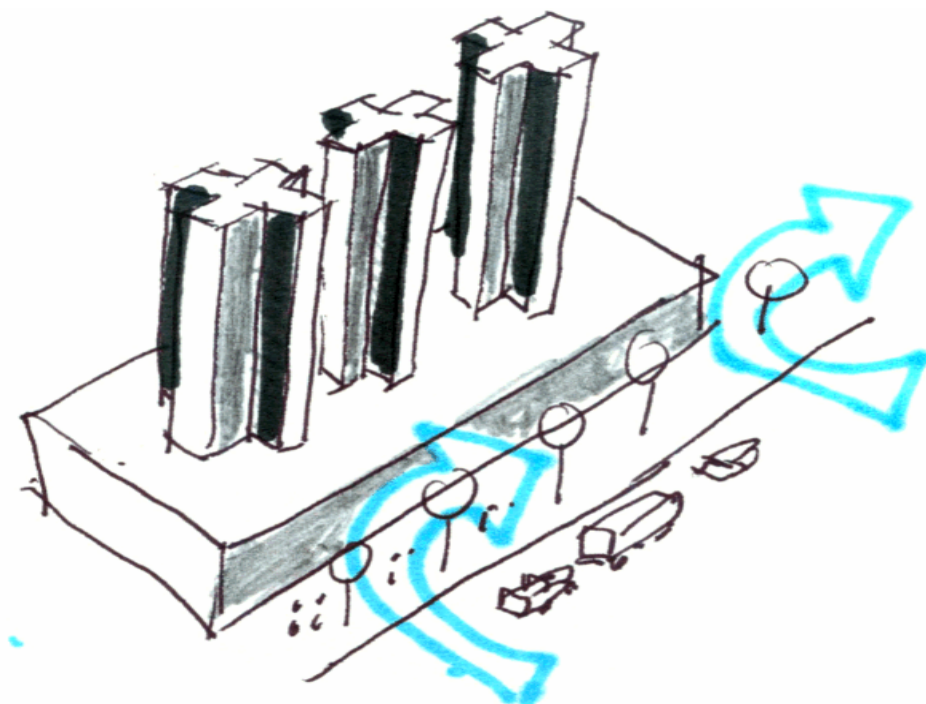
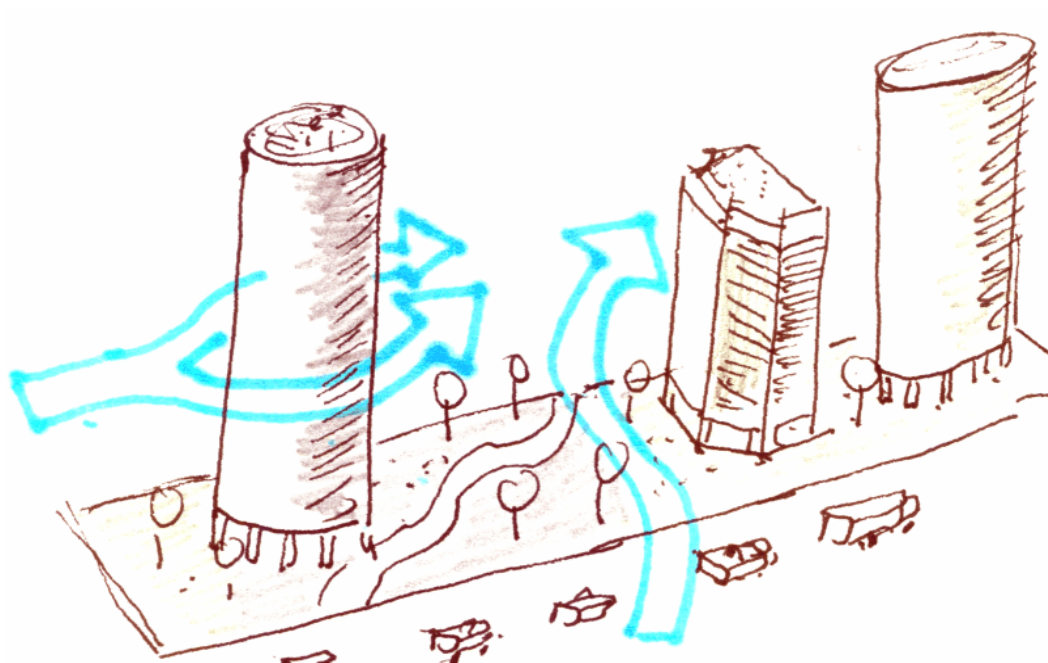


Figure demonstrating model of 'podium with tower', as imported from Hong Kong. This urban model creates fortresses that disturb the natural ventilation of a city, aggravate continuous landscaping plans and create major difficulties to the mobility of pedestrians. The model goes against all desirable precepts of sustainability and green environmental design.

Sketch by author.

A better solution for urban integration is to designate automobile traffic and parking zones at a underground level, leaving street level areas free for green zones and pedestrian activity, as well as reducing pollution and allowing for greater number of quality public spaces which are in fact essential for the healthy development of the elderly and children. Moreover, parking structures should be space-optimised in automatic parking silos, having the added benefits of lower pollution levels, higher parking capacity and greater security.



*Figure explaining a better urban integration model, allowing for a more sustainable and greener city. The building (residential, commercial, parking, etc) without podiums and enabling for better public spaces at pedestrian level (especially for the elderly and children), facilitation urban ventilation patterns and better parking infrastructure.
Sketch by author.*

7. Change of the isolation policy (of island territory) to one of openness and integration, in accordance to the regional plans of 9+12

The national development plans for China, of which Macau takes integral part in, promote the cooperation and mutual benefit in several facets, including cooperation in economic, cultural, tourism, etc strategies. Distribution and integration of regional diversity may also be applied to housing policy, similarly to the way it has already been integrated in education, with the transfer of Macau University to the Hengqing Island, serving simultaneously the residents of Macau and Zhuhai.

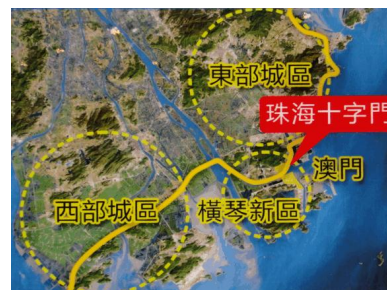
Macau is has a limited territory, on which it is unsustainable to continue building ‘cement forests’ in areas that critical and characteristics to the city, such as historical heritage zones, green spaces, leisure zones, all of which are essential to the integral and healthy development of the human being.



Hengqing Island plan, providing for SPACE for the integrated and sustainable development of Macau, supporting the diversification of activities



Diagram explaining the national concept of 3 axis and 4 levels of development for Macau, in the Pearl River Delta



Connectivity vectors and development of the panoramic corridor for the coastal zone

The connectivity and integration of Macau and neighboring regions is a reality, from the planned bridge to Hong Kong to the relocation of Macau University to Hengqing Island in Zhuhai, as well the actuality that most of Macau's citizens now reside in Zhuhai. Having space resources available in the neighboring territories allows the city to maintain and preserve the essential areas for health, culture and tourism, instead of destroying them to build 'cement forest' housing units.



New CBD Shijimen Zone with connections to Macau (image from journal Ou Mun Iat Bou, 29 June 2010)

Macau is a territory with large economic and financial resources and thus it is unjustifiable to continue supporting construction of low economic quality. The 'cement forest' model is not compatible with the Macau and Chinese governments' vision, of transforming Macau into an 'international centre for tourism and leisure', and provide quality and harmony for the city's resident families.



Image depicting the concept for Tianjin Eco city, with quality exterior and interior space design.

Having served our obligations as citizens, we shall eagerly await comments on our opinion, as presented in this document.

With best regards,

Nuno Roque Jorge

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Francisco Vizeu Pinheiro

Editor