Designing an Age Friendly Living Environment

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Hong Kong entering into an ageing society

• In Hong Kong, it is projected that 22% of the total population will reach 60 years old or above, in the year 2030.
• Nowadays, the percentage of educated older persons is becoming significant.
• 20 years later, 63.6% of the elderly population will have received secondary education level or above.
• Thanks to continuing advances in medicine, people can generally look forward to better health and longer life expectancies.
• Older persons who are both better educated and healthier are likely to place greater importance on quality of life issues than the present cohort.
From Issues to Questions

• How to **design a habitable living environment** to cope with this significant demographic change?

• How to **sustain a life with quality** for the coming generation of older citizens?

• In 2002 and 2007, the WHO launched world wide campaigns to promote ‘active ageing’ and ‘age-friendly city’.

• Is it possible to apply such concept of age-friendly city to Hong Kong?
Research aim: to design a habitable living environment for older people
Published Books & Reports of research on living environment for elders and participatory action research
Forthcoming chapter and journal publications
co-writer: Dr Ben Ku (APSS)

• Elderly people as "apocalyptic demography"? A study of the life stories of older people in Hong Kong born in the 1930s

Accepted by Journal of Aging Studies
From Theory to Policy and Design Suggestions

• We are shaped by the physical and social environments of our life; through processes of habitation and habituation we transform the spaces of our life into meaningful places (Rowles & Bernard, 2013)

• How does the city help the citizens to sustain an active life when they get old?
Age-friendly (urban) Living Environment

• An age-friendly living environment: various factors, including biological, cognitive, psychological, behavioural, economic, social, and environmental, of older individuals are considered for their attainment of physical and psychosocial well-being (Bond, 2004; WHO, 2002).

• In short, an age-friendly living urban environment should be holistic, incorporating values, beliefs, interests, expectations, and needs of various aspects of older individuals.
Focus of Existing Research on ‘Age Friendly Community’ in Hong Kong

• Focused on:
• elderly housing situations
• quantitative studies of accessibility of the older people in outdoor spaces.
Defining the urban space as living environment

- Theoretical definitions of ‘living environment’ --- for older urban dwellers
- 7 interrelated theories upon which we constituting the framework to organize the views on the urban space as living environment for older people.
• To see a person as an agent living in a different but inter-connecting environment network
• To see people as users of design products and services at different levels
Research on Age Friendly urban space

• Life is lived in Public realm. Public and shared spaces are critical environment shaping the everyday life of all urban dwellers.
Models of Ideal livable public environment for older people
Activities outside home: enhancing the quality of life of older people

• ADL: Home Environment
• IADL: Home/ outdoor Environment
• QoL: Outdoor environment

• The Activities of Daily Living (ADLs): movement in bed, transfers, locomotion, dressing, personal hygiene, and feeding.

Source: 大阪市立大学大学院生活科学研究科×大和ハウス工業総合技術研究所 2009
Ageing in Place: Mix used urban district where older people can live among others: they can shop, work, recreate, learn, receive care services in a neighbourhood environment.
Exemplary Sites of vibrant living environment for older people
A compact and vibrant neighbourhood setting in Yuen Long (source Ms L.Fung)
A research on the living environment with a holistic view: both home and outdoor environment
Research on Elderly Oriented Living Environment 2002-2005

(1) **Space**---In a city where the problem of ageing is becoming more and more serious, how are we going to prepare and plan the environment to cope with this social phenomenon?

(2) **Life**---How do the older persons organize their life? What are their expectations and goals?
Research process and findings

The research process was organised in four stages:

(1) **Questionnaire survey** – evaluation on the older persons’ (aged 60 or above) capacities of activities in different environments

(2) **Visual simulation modelling workshop** for designing ideal interior space;

(3) **Visual simulation modelling workshop** for designing ideal neighbourhood space.

(4) **In-depth Interview** with the active older persons
Visual Simulation Modelling Workshop for Ideal Neighbourhood (outdoor) Space
Base board: concentric circles representing walking distance from 5 minutes to 20 minutes
Components representing different facilities
Visual Simulation Modelling Workshop for Ideal Neighbourhood Space

1. Participants discussing on the relationship between their individual life and the community with the facilitators.

2. Participants selecting preferred components for constructing the ideal neighbourhood space.
3. Facilitators guiding and encouraging the participants to design their ideal neighbourhood space.

4. A group of participants with their design.
Visual Simulation Modelling Workshop for Ideal Neighbourhood Space

5. A finished model
作品 2

日期：2003年4月22日

參與者姓名：李女士、謝女士、張女士、李女士、胡女士

地方：聖雅各福群會老人社區服務中心

近家社區環境設計工作坊

1. 街市
   - 水果店、魚檔、衣物店、蔬菜店

2. 公園
   - 購物商場
   - 公園
   - 餐廳
   - 便利店
   - 銀行

3. 社區會堂
   - 營養市場
   - 會堂
   - 大會堂
   - 中學
   - 體育館

備註：
- 有電梯的行人天橋有蓋行人通道
- 有蓋行人通道

地區中央公園

游泳池

消防局

警署

室內運動場

小學

中學

圖書館

小巴站

巴士站

公園

草地

家

社區會堂

街道

5min

10min

15min

20min
Conclusion of the project

• A schema explaining the guidelines for design a good living environment for older persons. The schema consists of 60 interrelated concepts.
60 Concepts constituting the Design Guidelines for Living Environment for the Elderly (from bed side to street)

|---------------------------|------------------------|-------------|----------------------|------------------------|-------------------------------|
Participatory Action Research Applied to Public Space Design by older people (2013)

Collaborator: the SKW Tseung Kwan O Elderly Services

The frequent hikers of the route advocated for collective participation in the design project of the route initiated by the District Council.

The map of the Duckling Hill hiking route (Tseung Kwan O) drawn by the older people.
Participatory Action Research Applied to Public Space Design by older people

<table>
<thead>
<tr>
<th>Facility</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toilet</td>
<td>Exercise</td>
</tr>
<tr>
<td>Pavilion</td>
<td>Running</td>
</tr>
<tr>
<td>Pedestrian Ramp</td>
<td>Dancing</td>
</tr>
<tr>
<td>Seats</td>
<td>Chess Playing</td>
</tr>
<tr>
<td>Handrails</td>
<td>Tea Drinking</td>
</tr>
<tr>
<td>Railings</td>
<td>Chit-Chatting</td>
</tr>
<tr>
<td>Stone Repair</td>
<td>Eating Fruits</td>
</tr>
<tr>
<td>Exercise Equipment</td>
<td>Mahjong Playing</td>
</tr>
<tr>
<td>Hand-Wash Basin</td>
<td>Enjoy the View</td>
</tr>
<tr>
<td>Trees</td>
<td>Enjoy Clean Air</td>
</tr>
<tr>
<td>Planting Area</td>
<td></td>
</tr>
<tr>
<td>Rubbish Bin</td>
<td></td>
</tr>
<tr>
<td>Warning Signs</td>
<td>Civilian Conservation Team</td>
</tr>
<tr>
<td>Route Signs</td>
<td></td>
</tr>
<tr>
<td>Civilian Construction Signs</td>
<td></td>
</tr>
<tr>
<td>Emergency Assistance Facility</td>
<td></td>
</tr>
<tr>
<td>Drinking Fountain</td>
<td></td>
</tr>
</tbody>
</table>

Pictorial map including 22 locations of interest on the Duckling Hill hiking route
Types of facilities (green icons) and popular activities (red icons)
The workshop had invited 112 older people to be participants.

Older people voted for the agreement on the design ideas of the route (choosing the preferable facilities to be built on each of the 22 locations).
Integration of all the design ideas of the 8 groups
Results and Impacts

• A report on the workshop was written by the research team in Chinese and submitted to the representatives of the older people for review.
• The older people continued to send letters to the Government to propose their design ideas.
• As a result of these efforts, at a meeting on 4 September 2014, the District Council agreed to budget approximately 4 million HK dollars for the installation of facilities on the hiking route.
From Environment to Everyday Life

• Space as material support for life
How active are Hong Kong Older people?  
How do they live in the urban environment?
Research on Lifestyles of Active Older Persons 2007-2009
<table>
<thead>
<tr>
<th>Life Course Theory</th>
<th>Desires for Continuity</th>
<th>Active Ageing</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Life is a continuous process</td>
<td>• One trends to sustain the continuity of identity and life experience</td>
<td>• Older people should be empowered</td>
</tr>
<tr>
<td>• Ageing occurs from birth to death</td>
<td></td>
<td>• To optimize opportunity for health participation and security</td>
</tr>
<tr>
<td>• Older people make adjustments to changes</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Age Friendly City**

• Recognizing the capacities and resources among older people
• Responding to ageing-related needs and preferences
• Respecting decisions and choices of older people

**The quest for Life Space and Quality of Life**
Research Details

• May 2007 - Feb 2009

• We have conducted semi-structured interviews with 55 older persons

• 5 older persons could not meet the requirements:

  (1) age 60 or above (2) active and in good physical condition (3) possess Junior high school level
Background of Informants

(a) Gender:
36 female and 14 male (50 informants)

(b) Age:
• 60-64 years old (17 informants)
• 65-69 years old (16 informants)
• 70-74 years old (6 informants)
• 75-79 years old (5 informants)
• 80 years old or above (6 informants) The oldest informants is 86 years old.

(c) Education:
• College degrees or above (20 informants)
• High school level (14 informants)
• Junior high school level (13 informants)
• Primary School (in the sixth grade) (2 informants)
• Without formal school education (1 informant) (acquired Junior high school level through self-learning)
Significant Findings

• *Staying Active*
  • All of the informants stayed active and incorporated a great variety of activities into their everyday lives.
  • They *all went out every day* and took part in different activities outside the home; for all informants, the average time spent outside home was 9.5 hours (weekday) and 11.5 hours (weekend).
  • Most of the informants got up early in the morning (around 6-7 am); they usually carried out activities outside the home during the daytime and were back home before dinner.
Life pattern of an informant (weekday and weekend)

<table>
<thead>
<tr>
<th>Time</th>
<th>Place</th>
<th>Transportation</th>
<th>Activity</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>早</td>
<td>六時許：女兒坑口家中</td>
<td>地鐵</td>
<td>起床、吃早餐</td>
<td>每星期參與一至兩次探訪獨居長者活動，時間不定。</td>
</tr>
<tr>
<td>七時許</td>
<td>沙田第一城兒子家</td>
<td>地鐵</td>
<td>吃早餐</td>
<td></td>
</tr>
<tr>
<td>八時至十時</td>
<td>沙田第一城兒子家</td>
<td>步行</td>
<td>太極運動</td>
<td></td>
</tr>
<tr>
<td>七時許</td>
<td>沙田第一城快餐店</td>
<td>步行</td>
<td>吃早餐</td>
<td></td>
</tr>
<tr>
<td>八時三十分至十時</td>
<td>藍田酒樓</td>
<td>巴士</td>
<td>與太極班學員及老師飲茶</td>
<td></td>
</tr>
<tr>
<td>七時許</td>
<td>沙田第一城快餐店</td>
<td>步行</td>
<td>吃早餐</td>
<td></td>
</tr>
<tr>
<td>（星期三）八時三十分</td>
<td>理工大學</td>
<td>巴士</td>
<td>上課 - 理工大學長者體驗大學生活計劃</td>
<td></td>
</tr>
<tr>
<td>七時許</td>
<td>沙田第一城快餐店</td>
<td>步行</td>
<td>吃早餐</td>
<td></td>
</tr>
<tr>
<td>十時許</td>
<td>回家</td>
<td>步行</td>
<td>小休</td>
<td></td>
</tr>
<tr>
<td>（星期日）十時三十分</td>
<td>鑽石山教會</td>
<td>地鐵</td>
<td>崇拜</td>
<td></td>
</tr>
<tr>
<td>十一時</td>
<td>沙田第一城酒樓</td>
<td>步行</td>
<td>與母親飲茶</td>
<td></td>
</tr>
<tr>
<td>午餐</td>
<td>十一時</td>
<td>沙田第一城酒樓</td>
<td>步行</td>
<td>與家人下午茶</td>
</tr>
<tr>
<td>十一時</td>
<td>沙田第一城酒樓</td>
<td>步行</td>
<td>與母親飲茶</td>
<td></td>
</tr>
<tr>
<td>十二時三十分至二時</td>
<td>藍田酒樓</td>
<td>步行</td>
<td>與跳舞學員及午餐</td>
<td></td>
</tr>
<tr>
<td>（星期三）十一時</td>
<td>沙田第一城酒樓</td>
<td>步行</td>
<td>與家人下午茶</td>
<td></td>
</tr>
<tr>
<td>十二時</td>
<td>藍田酒樓</td>
<td>巴士</td>
<td>餐飲</td>
<td></td>
</tr>
<tr>
<td>五時</td>
<td>回藍田家</td>
<td>地鐵</td>
<td>看電視，做家務</td>
<td></td>
</tr>
<tr>
<td>五時</td>
<td>藍田酒樓</td>
<td>步行</td>
<td>與家人下午茶</td>
<td></td>
</tr>
<tr>
<td>五時</td>
<td>藍田酒樓</td>
<td>巴士</td>
<td>與家人下午茶</td>
<td></td>
</tr>
<tr>
<td>五時</td>
<td>沙田第一城兒子家</td>
<td>地鐵</td>
<td>準備晚餐</td>
<td></td>
</tr>
<tr>
<td>六時</td>
<td>沙田第一城兒子家</td>
<td>地鐵</td>
<td>出外晚餐</td>
<td></td>
</tr>
<tr>
<td>九時</td>
<td></td>
<td></td>
<td>看電視</td>
<td></td>
</tr>
<tr>
<td>（星期五）</td>
<td></td>
<td></td>
<td>用電腦上網</td>
<td></td>
</tr>
<tr>
<td>九時</td>
<td></td>
<td></td>
<td>看電視</td>
<td></td>
</tr>
<tr>
<td>（星期四）</td>
<td></td>
<td></td>
<td>用電腦上網</td>
<td></td>
</tr>
<tr>
<td>九時</td>
<td></td>
<td></td>
<td>看電視</td>
<td></td>
</tr>
<tr>
<td>十時三十分</td>
<td></td>
<td></td>
<td>上床休息</td>
<td></td>
</tr>
</tbody>
</table>

(Continued...)
Healthy Informants are highly mobile

- All informants undertook cross-district activities nearly every day.
- Apart from walking, the informants employed diverse forms of transportation to get around, including bus, railway, private vehicle, mini-bus, tram, ferry and taxi.
- They loved to travel, and most traveled regularly. the preferred destination: Mainland China, overseas.
- Many informants also regularly joined local tours.
Places an informant goes

居住地區：藍田
每週會到的地方：鑽石山、官塘、沙田、旺角、坑口、紅磡
不定期會到的地方：新界、中環、尖沙咀、天水圍、北角、將軍澳
一年內會到的地方：到外國旅遊
Findings

The informants reveals the need of:

• Better Health care services

• Continuous education and opportunities for ‘cultivation’

• More possibilities of social participation in all aspects (including opportunity for work)
Analysis
3-B Model analysis: Life should be of good quality

- This model serves as a means of understanding how community factors influence health and well-being.
- The quality of life model directs attention to how these factors affect individuals’ lives by considering whether and how basic human needs are being met within a community.
- In 3-B model, quality of life is defined as “the degree to which a person enjoys the important possibilities of his or her life in three areas”.*

3-B model

(1) **The area of Being** reflects: “who one is” and has physical, psychological, and spiritual components.

(2) **The area of Belonging** is concerned with the fit between a person and his or her physical, social, and community environments.

(3) **The area of Becoming** refers to the activities that a person carries out to achieve personal goals, hopes, or aspirations. Becoming involves practical or day-to-day activities, leisure pastimes, and those activities that help one to cope and grow.

The different aspects of life and the opportunities offered to the older people
General Research Fund Project 2011

• Independent living, active ageing to ‘Age Friendly City’- preparing the city of Hong Kong for the ageing society
• A comparison with the case of Shanghai
Card Game Design (Back Side)

Card Game Design (Front Side)

工作坊的遊戲卡設計 (背面)

工作坊的遊戲卡設計 (正面)
Workshop for conceiving ideal life patterns after retirement (informants 48-65 years old)
Ideal life patterns after retirement

• Preliminary Findings
### Hong Kong Aspired life after retirement (from 100 informants aged 48-65)

<table>
<thead>
<tr>
<th>Activities in everyday life</th>
<th>Frequency</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work</td>
<td>30% Pay job</td>
<td>Several times each week</td>
</tr>
<tr>
<td></td>
<td>70% Volunteer work</td>
<td>20% willing to work in other districts</td>
</tr>
<tr>
<td>Investment</td>
<td>33%</td>
<td>At least once a week</td>
</tr>
<tr>
<td>Shopping</td>
<td>60%</td>
<td>More than once a week</td>
</tr>
<tr>
<td>Travel</td>
<td>47% aboard</td>
<td>once in a few months</td>
</tr>
<tr>
<td></td>
<td>62% local travel</td>
<td>30% willing to shop in other districts</td>
</tr>
<tr>
<td>Sports</td>
<td>60%</td>
<td>Once a week</td>
</tr>
<tr>
<td></td>
<td>35%</td>
<td>50% in the neighborhood</td>
</tr>
<tr>
<td>Meeting with relatives</td>
<td>60%</td>
<td>Several times a week</td>
</tr>
<tr>
<td></td>
<td></td>
<td>46% willing to have gathering in other districts</td>
</tr>
<tr>
<td>Social activates</td>
<td>50%</td>
<td>Several times a week</td>
</tr>
<tr>
<td></td>
<td></td>
<td>12% willing to have gathering in other districts</td>
</tr>
<tr>
<td>Learning</td>
<td>54%</td>
<td>Once weekly</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10% willing to have gathering in other districts</td>
</tr>
<tr>
<td>Cultural activities</td>
<td>Cinema going 38%</td>
<td>Once a month</td>
</tr>
<tr>
<td></td>
<td></td>
<td>15% willing to go to cinema in other districts</td>
</tr>
<tr>
<td></td>
<td>Exhibition 45%</td>
<td>Several times a month</td>
</tr>
<tr>
<td>Activities in everyday life</td>
<td>Frequency</td>
<td>Location</td>
</tr>
<tr>
<td>----------------------------</td>
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<td>----------</td>
</tr>
<tr>
<td>Work</td>
<td>50% Pay job weekly</td>
<td>20% willing to work in other districts</td>
</tr>
<tr>
<td></td>
<td>50% Volunteer work weekly</td>
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</tr>
<tr>
<td>Investment</td>
<td>23% At least once a week</td>
<td>59% willing to work in other districts</td>
</tr>
<tr>
<td>Shopping</td>
<td>80% At least once a week</td>
<td>59% willing to work in other districts</td>
</tr>
<tr>
<td>Travel</td>
<td>47% aboard/ in other provinces Once every month in the neighborhood</td>
<td></td>
</tr>
<tr>
<td></td>
<td>48% local travel Once every year in the neighborhood</td>
<td></td>
</tr>
<tr>
<td>Sports</td>
<td>70%</td>
<td>in the neighborhood</td>
</tr>
<tr>
<td>Meeting with relatives</td>
<td>75% Once every month 23% willing to have gathering in other districts</td>
<td></td>
</tr>
<tr>
<td></td>
<td>34% Every week</td>
<td></td>
</tr>
<tr>
<td>Social activates</td>
<td>62% Weekly In the neighborhood</td>
<td></td>
</tr>
<tr>
<td>Learning</td>
<td>50% Weekly</td>
<td>willing to go to learn in other districts</td>
</tr>
<tr>
<td>Cultural activities</td>
<td>45% Cinema going Once in a few months willing to go to cinemas in other districts</td>
<td></td>
</tr>
<tr>
<td></td>
<td>71% exhibition Once a year willing to work in other districts</td>
<td></td>
</tr>
</tbody>
</table>
Design of a livable district for older people: The case of Hong Kong

Design of Professor Tim Jahner
Exhibition organized by the Senior Citizen Home Safety Association
26 January 2015
Livable Living Environment for Older People

**Home Space with Quality**
- Essay Maintenance
- Personal Expression
- Habits practice Space
- Facilities to aid independent living
- Safety

**Ageing-in-Place**
- Easy contact with friends and family

**Healthy Living Neighbourhood**
- Social gathering and leisure places
- Promenade space
- Convenient Neighbourhood offering daily necessities
- Health care services

**Active Lifestyle**
- Space for Sports
- Free/ affordable Sport facilities and Programmes
- Opportunities for work
- Lifelong learning
- Cultural, spiritual and leisure life
- Participation in social /political affairs

**Healthy Living**
- Easy contact with friends and family
- Affordable /well connected transportable network

**Essay Maintenance**
- Personal Expression
- Habits practice Space
- Facilities to aid independent living
- Safety

**Active Lifestyle**
- Space for Sports
- Opportunities for work
- Cultural, spiritual and leisure life
- Participation in social /political affairs
Conclusion

• Age is a social construct
• Becoming old at the age of 65 is a social creation that originated in the Western countries in the 19th Century
• Old citizens should be encouraged to work, and to ‘exercise, have sex, take holidays, socialize in ways indistinguishable those of their children’s generation’ (Blaikie 1999: 104)
Hong Kong

• Most policies are still about offering supports to older citizens (who need care) in an interior context.
• The ‘age friendly city’ : await to be constructed in the context of Hong Kong.
You are never too old to set another goal or to dream a new dream
(C.S. Lewis)