Environment and Ageing:

Environmental Policy, Planning and Design for Elderly People in Hong Kong

edited by

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and

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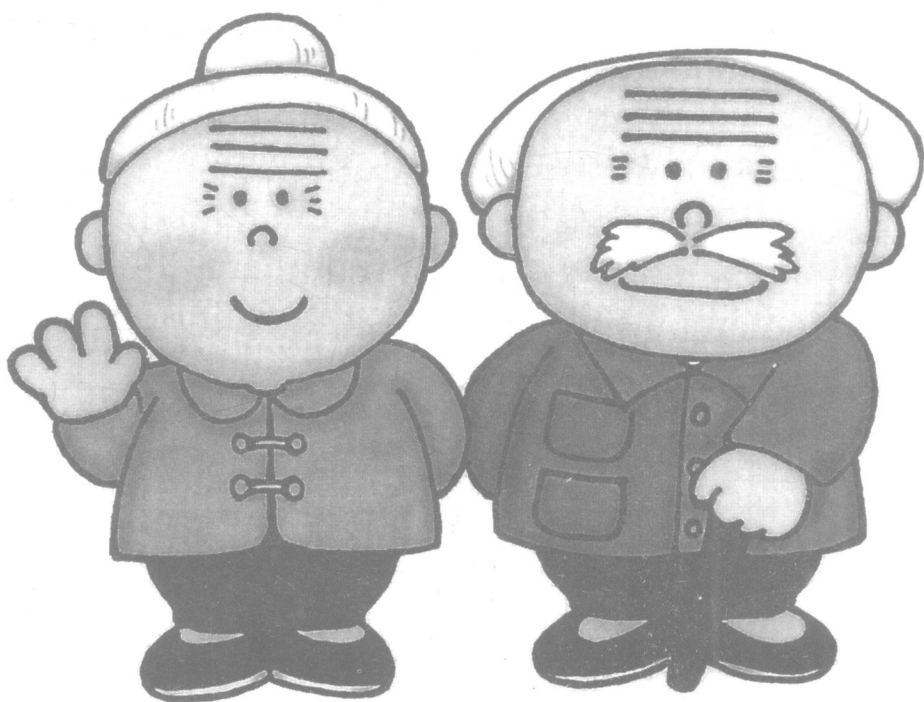Centre of Urban Planning and Environmental Management
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FOREWORD

Planning a Better Environment for Elderly People in Hong Kong

Yiu-Chung TAM

Hong Kong's population is ageing; we have more and more elderly people. We also have an unprecedented number of "older" old people, those in the 75 to 80 year age bracket. They have their specific needs in all aspects of living. As a caring community, we have to adopt a whole new approach to prepare ourselves to cater for these needs.

Over the years, we have been concerned about services and financial support for the elderly. We are still concerned. They are important, irrefutably. But, as the population is ageing, should we not also adopt a more forward-looking approach? Shouldn't we also start looking at more basic matters to prepare for the coming days?

We need *care* for the elderly people, penetrating every aspect of the community, in services, in support and in the physical environment. A good environment in which our elderly people can live their life happily is essential to their sense of belonging, on which the Chief Executive, Mr Tung Chee-Hwa, has placed particular emphasis in his policy address.

The physical environment is not human, but its planning is. Planning has to be in context, based on knowledge of the ageing population it is looking at. We should find out the real needs of the elderly from their perspective rather than from what we think they would need. Our planning mechanism should take account of them, to enhance their satisfaction.

"Planning with care", in land use, housing, transport and in various aspects of infrastructure, will move towards the constitution of a caring

environment. We plan with care and care with planning. The concept must transcend all sectors. In a caring environment tailored to their needs, the well-configured hardware, all kinds of services and support, the software, will deliver the best. Only with all these factors ready will our elderly people be able to live their life happily with dignity. Through the talks given by prominent academics and professionals on various related subjects, I am sure you will be able to appreciate the message of *Planning a Better Environment for Elderly People in Hong Kong*. I hope you will bring home this message and make it happen for the benefit of Hong Kong's elderly people.

INTRODUCTION

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The Environment and Elderly People - An Emerging Social and Planning Issue in Hong Kong

David R. PHILLIPS and Anthony Gar-On YEH

HONG KONG: AN AGEING SOCIETY

Hong Kong's population is ageing demographically, a fact now widely recognised in academic and official publications. The proportion of elderly people aged 60 and over in the Special Administrative Region's population increased from 7.4 percent in 1971 to 14.3 percent in 1996. Absolute numbers in the age group increased from 293,273 to 889,850 over the same period. Hong Kong now has one of the highest percentages of elderly people in Asia, in percentage terms, currently second only to Japan. Other demographic and health indicators have shown similar improvements in the SAR. For example, the life expectancy at birth of Hong Kong's citizens has increased from 67.8 years for males and 75.3 years for females in 1971 to 75.9 years and 81.5 years in 1996 respectively. This is amongst the highest life expectancies in the world. However, much as these indicators illustrate how successful Hong Kong's social and economic achievements have been, the demographic ageing of populations everywhere has often been associated with various social and environmental problems. There are many changing needs associated with generally increasing dependency among ageing populations, which have great implications for land use planning, housing, transport and overall infrastructure. They have very many other implications for economies and society which are outside the direct focus of this book but which are also of great relevance.

The cities elsewhere of Europe and North America which have similar proportions of elderly people have decades and even centuries to evolve social and infrastructural policies to help their ageing populations. Yet many have often still not been successful or at best partially successful. By contrast, Hong Kong is having to face the challenge of rapid demographic ageing over a matter of only twenty or thirty years. This book seeks to identify the current and future challenges and asks what measures is Hong Kong putting in pace to meet them?

Hong Kong is likely to continue to develop rapidly in physical terms and, even if its population were to gain a youthful injection from in-migration over the coming two decades or so, the SAR will continue to have a growing number of elderly people. A key feature will be an unprecedented number of very elderly people aged 75 or 80 years and over. No single profession or academic discipline can provide a total solution to the challenges posed by rapid demographic transition. It is one of the most interesting and important social, physical and economic phenomena of our time, the success of which will affect most of our futures. A multidisciplinary approach is needed to provide the means of developing an optimum environment for the territory's elderly population.

DEMOGRAPHIC AND POLICY CONTEXTS

The origins of this book lie in the growing interest among various professions in Hong Kong in the general and specific implications of population ageing. Its direct stimulus was a symposium held in January 1998, "Planning a better environment for Hong Kong's elderly people". The symposium was jointly organised by the Centre of Urban Planning and Environmental Management at the University of Hong Kong and Lingnan College's Asia-Pacific Institute of Ageing Studies. The symposium specifically addressed the planning, accommodation and environmental issues faced by the SAR at present and in the near future. Participants included academics, planners, architects, physicians, social welfare providers and representatives of the private and voluntary sectors. It was very clear that, if the challenges of population ageing were to be successfully met, this could only come from a combined interdisciplinary and inter-professional collaboration. The chapters in this book include re-written versions of paper presented at the symposium with additional invited material.

Superimposed on the demographic characteristics of a rapidly ageing population structure are many other features that make the local

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environments for elderly people increasingly important. The first is the policy in Hong Kong, common to many other countries, that care for older people should ideally be set in the community, preferably in their own homes, for as long as possible. Institutionalisation, into formal residential or hospital settings, is only a last resort in such a policy. This concept, associated with *ageing in place* - the 'natural' ageing in their own environments of local populations - will be made vastly easier and more successful if the local environment is physically and socially suitable for the increasing numbers of ageing residents. Second, there are important family structure changes occurring in Hong Kong. Families are smaller - Hong Kong in the mid-1990s has amongst the lowest number of births per woman of anywhere in the world. The Population Reference Bureau in 1998 note that its total fertility rate is only 1.1 children per woman. Therefore, there will be fewer children in the medium and long term to look after their ageing parents, who are also themselves living longer and have the second highest life expectancy after Japan. These older people, some of whom do not have immediate family in Hong Kong, will increasingly be thrown on to other sources of formal and informal support in the community. Technically speaking, demographers note an increasing *dependency ratio* in many countries such as Hong Kong, in which the numbers of elderly people (defined varyingly as those aged over 60 or 65 years) increase relative to the numbers of people of working age (aged 20-60 or 20-65). This means that there will be proportionately fewer workers economically active, keeping the economy going, and to assist with various aspects of care of elderly people as well as the other tasks demanded in a modern economy. If environmental settings can facilitate the better living of all age groups, especially elderly people, and enable them to live with minimal outside intervention, or assist elderly people to help one another, this too will be a great social and personal boon.

PLANNING - THE NEED FOR AN INTEGRATED VISION

Given these demographic facts, a major question becomes: to what extent can the planning process assist in the development of appropriate local environments for elderly people? This issue has barely been addressed in a sustained fashion even in the countries of Europe that have much longer histories of demographic ageing. The ageing countries of the Asia-Pacific region, such as Japan, Hong Kong, Singapore, Taiwan, Korea, China and Macao, will not have the luxury of time over which to adapt and develop the environment. In Hong Kong, the issue is real and contemporary. The Hong Kong SAR has been very rapidly expanding, with new town

development and extensive building outside the existing urban areas, extending into virtually every part of the territory. In addition, comprehensive urban redevelopment schemes are being undertaken in the older areas and a number more are planned for the next few years.

A number of the papers in this collection emphasise that the Hong Kong approach to planning environments has to date been principally based on physical criteria, with a relatively shallow veneer of social planning. This is certainly understandable in view of the territory's pressing need to date to meet huge housing demand and to cater for mass provision family housing. Today, the circumstances and needs of many in the population are changing. For almost all groups, the quality and range of social environments and the social support infrastructure of shops, services, security, transport and housing, are almost as important as mere physical provision. For elderly people and for families with young children, this support system becomes even more important. Hong Kong has chosen to plan its services and infrastructure in considerable specified detail, according to the Planning Standards and Guidelines discussed in subsequent chapters. The territory has also evolved a mix of formal government, government assisted (subvented) and private health and social welfare service providers, and a varied public-private mix in housing, transport and infrastructure. This blend means that comprehensive and integrated planning of local and wider environments, whilst better than in many other countries, has been to an extent neglected or made more difficult. In this book, the issue of integrated planning, involving government, NGO and private sectors is highlighted as a key issue.

Hong Kong is relatively unusual and fortunate in that an Elderly Commission has been established since July 1997 (Appendix 1.1). It has unbrella advisory and coordinating roles in the development of a comprehensive policy for elderly people (see Chapter 8). Its Chairman, Mr. Tam Yiu-Chung, has provided the Foreword for this book.

In addition to social and physical aspects of planning, the book stresses the need for vision as to how the SAR can develop its local environments so that they are more suitable for generally ageing populations. The book therefore opens with a number of overview papers, illustrating broader issues related to the importance of local environments, housing and health plus the environmental needs of elderly people, and their changing spatial distributions. These papers individually and collectively point to the need for imaginative approaches to the future of local environmental development and redevelopment. There follow a number of position papers which identify

the policy and practices with respect to planning relevant to ageing populations of the principal government departments in the SAR. These provide detail of the current planning issues and approaches, from the Planning Department, Housing Department, Urban Services and Social Welfare Department. All have key roles to play in the future design and development of physical and social environments for ageing people. The final group of papers incorporates the essential but often overlooked non-governmental, voluntary and private sectors. These include a paper illustrating integrated architectural solutions to current and future developments that the private sector developers might implement. There is also the perspective of people with physical and access problems, in a paper on environmental practical problems identified by Rehab Power. This group is very important in reminding readers that it is not only elderly people but those of all ages who might have disabilities which can be mitigated or exacerbated by planning and practical service provision. Sadly, however, in Hong Kong, even modern planned environments all too often exacerbate the problems of people with even minor disabilities. It is also crucial to remember that most younger elderly people do not have impairments but that, at times in the future, they may develop impairments and, as individuals and populations age, the prevalence of impairment leading to disability and handicap, generally increases. It should be the task of good integrated planning to ensure that, as far as possible, avoidable problems are actually avoided and that future environments will allow people to age in place with minimal personal adjustments necessary. An imaginative vision of the future, which Hong Kong has so readily demonstrated in many other spheres of economy and society to date, is now even more pressing.

As editors of this book and as co-organisers of the symposium in January 1998 on which it is largely based, we have been very impressed by the responses of participants and the subsequent enthusiasm to ensure that this book is a truly inter-disciplinary and multi-profession publication. We feel it very important that this book marks a starting point in the recognition of multi-disciplinary and comprehensive inter-sectoral planning of environments suitable for elderly people in Hong Kong. Already, many professional groups and the Hong Kong Association of Gerontology, to name but one interdisciplinary group, are following up the themes introduced here. Ageing in place and the development of appropriate environments for ageing populations are becoming key issues in Hong Kong. It is certainly our intention that this will be the first of many publications on the topic and we hope that regular future meetings will be held, with practical as well as academic outcomes.

ACKNOWLEDGEMENTS

APPENDIX 1.1

Development of Public Policy on Elderly Care in Hong Kong

Year	Main Event	Responsible Government Department
1973	White Paper on Social Welfare The Way Ahead	Hong Kong Government
1973	Report of the Working Party on the Future Needs of the Elderly	Hong Kong Government
1976	Programme Plan on Services for the Elderly	Hong Kong Government
1977	Green Paper on Services for Elderly	Hong Kong Government
1979	White Paper on Social Welfare into the 1980s	Hong Kong Government
1982	Revised Programme Plan on Services for the Elderly	Hong Kong Government
1986	Code of Practice for Private Homes for the Elderly	Social Welfare Department
1988	Report of the Central Committee on Services for the Elderly	Hong Kong Government
1988	Code of Practice for Private Homes for the Elderly (Revised Edition)	Social Welfare Department
1989	Report of the Working Group on Housing for the Elderly	Hong Kong Government
1991	White Paper on Social Welfare into the 1990s and Beyond	Hong Kong Government
1994	Report of the Ad Hoc Committee on Housing for the Elderly	Hong Kong Housing Authority
1994	Report of the Working Group on Care for the Elderly	Hong Kong Government
1995	The Residential Care Homes (Elderly Persons) Ordinance	Hong Kong Government
1995	Code of Practice for Residential Care Homes (Elderly Persons)	Social Welfare Department
1995	Mandatory Provident Fund Schemes Ordinance	Hong Kong Government
1997	Establishment of the Elderly Commission	Government of the Hong Kong SAR
1998	Establishment of the Mandatory Provident Fund (MPF)	Government of the Hong Kong SAR

ELDERLY PEOPLE AND THE ENVIRONMENT

2

The Importance of the Local Environment in the Lives of Urban Elderly People

David R. PHILLIPS

INTRODUCTION

For many age groups, but for elderly people in particular, the local environment can take on particular importance. Its nature and facilities can facilitate or impede many activities. It has been recognised for some time that elderly people generally have more restricted activity spaces than younger groups. For older people in general, and especially for people with problems of mobility, the local environment can directly affect their ability to remain living independently and also their quality of life and life satisfaction. Today, the role of the local (urban) environment is rendered even more important by at least three factors. These are, first the increasing numbers of older people associated with the demographic ageing of populations almost everywhere but especially in Hong Kong; secondly, the associated phenomenon of ageing in place and, thirdly, the emphasis in Hong Kong as in many countries on care in the community.

This chapter outlines key issues relating to the role of the environment, planning and design for elderly people and their households and the ways in which the environment can promote or deter independent living and provide or reduce risks and hazards. At the *micro-scale* (the *internal* environment), considerable attention has been paid to home design, access, maintenance and architectural aspects. The *meso-scale*, the *external* environment, comprises the local neighbourhood and is increasingly crucial because of the three factors noted above. It provides local opportunities and constraints by virtue of its physical planning, the range, cost and

situation of facilities including open spaces, recreational opportunities, shops, welfare and medical services. Design considerations can affect the segregation of traffic and pedestrians, the integration of transport modes and reduce road traffic accidents involving elderly people. This external environment scale has in general been less well researched but issues of accessibility loom large. Finally, the *macro-scale* environment, not considered in detail in this paper, involves the wider urban space in which localities are situated. It includes both the physical planning framework and the political economy that dictates in part the resources and financial circumstances of elderly people. Integrated neighbourhood and macro-scale planning for elderly friendly environments is poorly developed in most societies in part because of the numbers of professions and the public-private sector participants involved.

Unintentional ageism can be an accidental by-product of policies that have neglected to take account of the impacts of the local environment on elderly people at the planning stage. Indeed, can "elderly-friendly" local environments be successfully planned and provided? The rapidity of population ageing and the prospects of increasing numbers of people in the oldest old group in countries of the Asia-Pacific region including Hong Kong makes this a priority issue for current urban and social planning and urban redevelopment.

THE ROLE OF THE LOCAL ENVIRONMENT
FOR ELDERLY PEOPLE

The activity spaces and patterns of spatial behaviour of elderly persons are generally much more locally-based than those of other population groups. Therefore, the local environment in which older people live is likely to be of even greater influence on their activities and well-being than for most other age groups. When a person's physical mobility or economic ability to travel are impaired, this will inevitably impinge on their quality of life. However, the historical evolution of many cities means that they are poorly planned with respect to the complex nexus or web of local services and physical features of the local environment that enable or disadvantage elderly people. This is a feature of omission rather than active discrimination. It probably stems from the complexity of local environments and the needs of individual users and user groups that mean comprehensive social and physical integration of planning is relatively poorly developed. By comparison, Hong Kong has many opportunities to experiment with more comprehensive neighbourhood planning for elderly

people, given its rapid urban growth in the new urban development areas and the redevelopment areas. The pace of its demographic ageing and its focus on care in the community render this very important today.

There has been considerable interest in the field of social geography and some interest in planning and social gerontology in the local environment and its impact and meaning for elderly people. Key publications stem from the late 1970s and early 1980s by Rowles (1978) Lawton (1980), Lawton et al (1982), Rowles and Ohta (1983), Golant (1984) and a few others. However, much of this promising work has yet to be followed up and most subsequent research and professional interest has focused on specific issues rather than the integration of planning and practice. Residential moves, housing design and especially design and issues related to specialist accommodation for elderly people and the development of retirement communities, have featured prominently. Policy-related publications such as *Disabling barriers - enabling environments* (Swain et al, 1993) focus principally on the social aspects of barriers which people in general encounter in various social activities. By contrast, fewer publications have focused on the relationships between ageing people and the changing needs and demands placed on existing and new *local* urban environments. A recent book by Imrie (1996) provides a useful overview of disability in modern society and the modern built environment. He notes that many people with disabilities are locked out in modern space; the activities of the "design professionals" - architects, planners, building control officers and others can unintentionally exacerbate the impacts of disability. However, even for many elderly people without disability as such but merely experiencing some deterioration in physical ability and confidence with age, the local environment can make everyday life very awkward. This is unfortunate because, currently, a key policy in many countries has become to support people *in their own homes* for as long as possible and to provide services on a locality basis. However, relatively little work has reviewed the interrelations between home and local place, particularly specific and combined features that make for or detract from elderly-friendly environments.

A perspective should be taken on what it is like to live in a particular local environment for an elderly person. This could help to address the ways in which design practices and standards, co-ordination of services and transport and the like enable or disable continued living in the community - a sort of environmental audit of the setting in which the elderly person is a citizen. To date, there has been a range of legislation on

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access and design, in a number of European and North American countries (Imrie, 1996; Golledge and Stimson, 1997). However, the overall effect is probably piecemeal as regulations and standards generally apply only to new buildings and local developments.

In planning and design, a key concern has been specialised retirement housing (especially residential and nursing homes), including retirement communities as a whole. This has in many ways been the chief area of environmental research involving elderly people to date. However, the concentration on *segregated* accommodation and living environments may be somewhat unrealistic in the light of community care policies and aspirations. A more useful focus would be on the general aspects of living environments that the vast majority of elderly people will face. This is a more complex undertaking, as the concern will have to be with the needs of entire communities. Only a proportion will have some special needs, perhaps arising out of impairment, disability or handicap and not all by any means will be elderly people.

SOCIAL AND DEMOGRAPHIC CHANGE AND THE NEED FOR LOCAL ENVIRONMENTAL PLANNING

Today, a principal policy approach in many countries is to support *ageing in place* and to maintain people living *in the community* for prolonged periods. The background is to be found in care in the community, principles of normalisation and deinstitutionalisation. Another key factor is *demographic ageing* in virtually all developed countries and increasingly in many developing countries. There are increasing percentages and absolute numbers of elderly people in virtually all populations but, with the policies noted above, they are expected to live in the community rather than in institutions or specialised environments for as long as possible. This can be illustrated by the concept of successful ageing in place, with a range of assisted independent living (AIL) "middle ground" options (Heumann and Boldy, 1993). This extends functional independence in an environment of choice to allow people to age in a place with which they are familiar and content. However, as they note, it can be erroneous to assume that ageing in place can be a substitute for holistic planning and good support. Policies which seek to retain people in the community and in their homes also assume that the current environment ("staying put") is the chosen and preferred one. Ageing-in-place solutions are worthy but may be prejudiced because of the wider environmental conditions in which elderly people find themselves.

The Hong Kong Special Administrative Region of China provides a good example of an urban territory with a growing number of elderly people and where care in the community precepts are officially embraced. However, there is some feeling that this policy will be prejudiced by lack of community support and, indeed, by local environmental conditions. Very significant is that the 1996 By-Census puts the percentage of population aged 65+ at 10 percent, projected to rise to 13 percent over the next twenty years (Census and Statistics Department, 1997). The elderly dependency ratio (based on those aged 65-plus, rather than 60-plus) will rise from about 141 to 184. Fertility rates will continue to be very low, although Total Fertility Rates may increase to about 1.55 by 2016 compared with under 1.3 in the mid-1990s (an exceptionally low figure by international standards). This means that fewer young family members will be available to assist their ageing parents. Economic trends in which both adult partners in a household often now go out to work also mean that families will have reduced ability to care directly for their elderly members.

Another key feature of the demographic ageing of Hong Kong's population is that life expectancy at birth is projected to increase from, in 1996, about 76 years for males and almost 82 years for females, to 78 years and 83.4 years for males and females respectively by 2016. It is likely that only Japan in the region will have such life expectancies. The elderly population itself is also living longer and, at 80, males may expect to live a further 5 years and, females, 7 years. By the year 2016, it is projected that 80 year olds may expect on average to live to 88 and 90 years, respectively. Patterns of chronic illness amongst Hong Kong's older population are similar to those in many other developed and rapidly developing countries (Chi and Leung, 1995; Phillips, 1995). It is likely that levels of disability and associated local environment problems may be assumed also to be fairly similar. All these features mean that elderly people, who are living longer and will be likely to have fewer relatives available to help them, need local environments in which they can help themselves as best they can. In addition, it is recognised that many elderly people positively wish to live independently and actively. It should be the responsibility of good social planning to enable this.

These experiences of Hong Kong and many other Asian cities are largely unprecedented in terms of the rapidity of growth and ultimate numbers of old and very old people living in them. This calls for imaginative new policies to develop elderly-friendly environments. However, the main formal response to date has tended to focus on special

institutions, residential and infirmary care. Nevertheless, many countries are pinning their hopes on policies of care in the community for as long as possible, with institutional care a last resort. The widely-cited Asian approach to *family care* for elderly members has a similar outcome, as the family may be the mainstay of care in the community and ageing in place. In combination with demographic ageing, this has very important implications for environmental design, standards and quality.

ACTIVITY PATTERNS, THE LOCAL ENVIRONMENT AND ELDERLY PEOPLE

Place of residence is of great importance to any individual or family. Ageing is recognised as often having the effect of shrinking people's life-spaces. Therefore, the local environment assumes a proportionately much greater importance for older people. Elderly people are by and large less mobile than people of working age in particular; to social geographers and urban sociologists, they are said to have more constricted activity spaces (see, for example, Figure 2.1). An hierarchy of spaces, within which groups and individuals live, move and interact, has long been recognised: Familial space, Neighbourhood space, Economic space and Urban Sector or Regional space. These are progressively larger and overlapping dimensions of space and form a framework within which individuals or groups act out their daily routines (Golledge and Stimson, 1997). The four types of space are also variously identified as Personal space, Neighbourhood space, Activity space and Action space. The two last-named are of considerable importance in conceptualising the ways in which elderly people relate to their local environments.

Action space comprises the collective movements or "activity space" of people's daily lives. Action space is the area of which the individual has knowledge and contact (only usually a limited proportion of the broad range of environment is known and used). Action spaces are to a considerable extent individual, based on the knowledge and perceptions of individual people although they are similar for some groups, as they comprise a wide range of spatial behaviour (the journey to work, commuting, school trips, shopping, social and health care visits and the like). Golledge and Stimson (1997) note that an individual's perception of his or her environment is not static. It changes as roles change (for example, giving up work, school trips and the like) and therefore evolves with age. The individual components of action space - their activity spaces - among elderly people are likely to be smaller and fewer than those of working

Figure 2.1 **The Restricted Local Activity Patterns of Some Elderly Households**

21
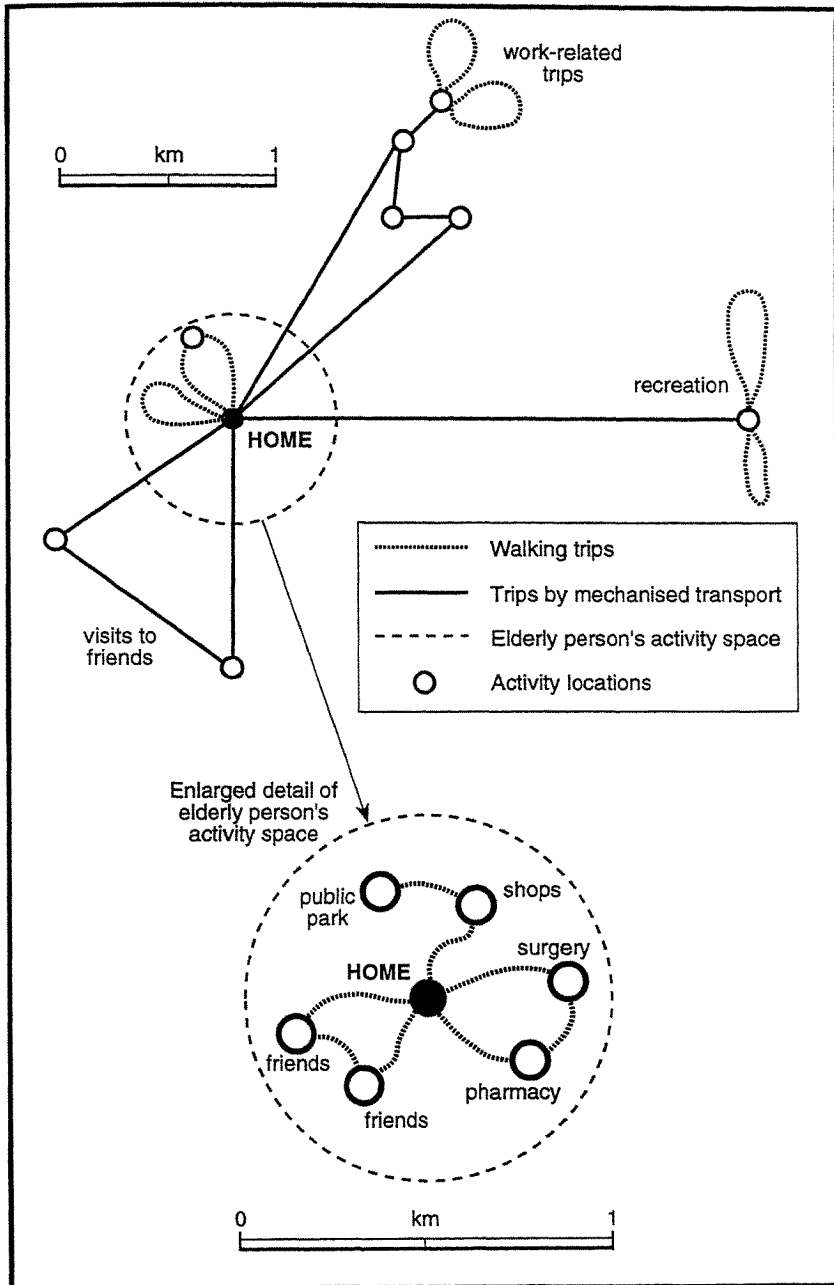
people. Indeed, for some years, it has been recognised that age is a considerable leveller in terms of activity patterns, more so than social and economic factors (Peace, 1977; Phillips, 1981). In this way, the local environment can come to be of paramount importance for many older people.

However, the literature reveals relatively few studies of the local environment and its relationship to the ability of older people to live normally in the settings and the relations with quality of life. Notable exceptions historically have been in the work of Lawton et al (1982), Golant (1984), Altman et al (1984) on ageing and the environment, often with a focus on housing, and Carstens (1985) with respect to site planning and design for elderly persons. The subject of *environmental psychology*, with its emphasis on how human behaviour, feelings and sense of well-being are affected by the physical environment (McAndrew, 1993) shows considerable work on attitudes to the local environment in the subject of environmental psychology. Substantial recent contributions are only just emerging in the area of elderly and environments (again, notable exceptions are Lawton and Altman's contributions - see for example Lawton, 1990). However, environmental psychology is important in its recognition that every physical environment is a social environment (and conversely) and that it is sometimes impossible to separate the two and especially *the interactions and relationships* between them (Proshansky, 1990, p.22).

Attachment to place and the concept of home are important and accord closely with the about action space and activity spaces. Many people naturally show geographic place dependence and a powerful attachment to specific places, and the importance of this for elderly people has been emphasised (Rowles, 1978; McAndrew, 1993). Strong place attachment may help elderly people weather the local environmental changes that can occur when, for example, neighbourhoods change and they are left behind. However, it can also indicate the potential problems of relocating elderly people to other residential environments and the possible psychological upheavals that may occur.

In the area of residential assessment and personal space/territoriality there appears to be much potential for contemporary environmental psychology to contribute to planning of environments for elderly people. In addition, some research indicates the attitudes of elderly people to types of housing, an aspect also taken up by architects, particularly in the work of Pastalan (1990) and Pastalan and Cowart (1989).

FACTORS INFLUENCING FUTURE DEMANDS ON THE LOCAL ENVIRONMENT

The changing needs and requirements of future generations of elderly people need to be anticipated. Indeed, planners should be aware that current patterns observed amongst elderly people and solutions to address these needs, including demand for and attitudes to retirement communities, their design and the like, might be inaccurate and unsuitable in coming decades (Golant, 1986). Future cohorts might have very different needs and expectations to those of today's elderly population. The characteristics most likely to change and affect planning and design considerations in the local environment are:

1. There will be more elderly people in virtually every society following demographic ageing and increasing dependency ratios

2. Many more of these elderly people living in ordinary home environments, ageing in place and as a result of community care policies

3. People will live, aged *in situ*, for longer; they are also likely to live longer with slight impairments or disability but not needing or able to receive specialist accommodation. There will be considerable more elderly women than men

4. Therefore, local environmental design will have to allow and provide for far greater numbers of people with physical, visual and other problems

5. The economic status of many older people is likely to be somewhat higher in coming than in past generations but expectations and aspirations may exceed individual economic ability to achieve them

6. Elderly people will have more political and economic clout as advocacy and political empowerment will make elderly residents and consumers potentially powerful in local voting (hence perhaps directly influencing local service provision and standards)

7. However, a major constraint will be whether the public-private mixture and the complexities of local environmental settings will permit more appropriate planning and design in local neighbourhoods

RISKS AND HAZARDS IN THE LOCAL ENVIRONMENT

The *internal* environment - people's homes - can be hazardous although design considerations can mitigate this. Environmental hazards can include a wide range of features, some of which are specific 'in-built' to the design of the accommodation, others are influenced by furnishings, fittings and the usage. Research in New South Wales found that, of 425 elderly people's houses checked, fewer than 20 percent had no hazards identified. 42 percent of houses had between one and five hazards; 26 percent had six to ten and an alarming 12 percent of households had more than eleven and as many as 36 hazards (Carter et al, 1997). Bathrooms were the most hazardous rooms on average, followed by the kitchen (generally thought to be the most dangerous room). Whilst there are various relations with socio-economic status and use of services, these hazards were on the whole moderately to very risky. Many related to lighting and flooring problems that might not present great dangers to fit, able bodied and keen sighted people. To elderly people with physical or other impairments, they could become a major threat. Other authors have identified environmental "risk areas" (for want of a better term), and injury has been found in international studies to be a leading cause of death and morbidity amongst elderly people. In the US, for example, falls have been identified as accounting for from one-third to two-thirds of accidental deaths amongst people aged 65 and over. A number of these could clearly have been avoided were the houses and local settings of the elderly people either more suitably adapted or better planned in the first instance.

The wider setting in which the older person's home is situated forms the *"external"* environment (Marans et al, 1984). In an extensive review of the literature in English on accidents involving older people, Lilley at al (1995) found a vast array of occurrences mainly in the external environment, many of which might have been avoided with better environmental planning. The review highlights the epidemiology of the accidents, risk factors, environmental factors and possible prevention with a focus particularly on falls, road traffic accidents, and burn accidents.

For example, although falls are known to be generally multi-factorial, the literature showed that between one-third and one-half of falls to elderly people in the community are due to or precipitated by environmental factors, either in the home or local neighbourhood. If good environmental planning can help avoid even a relatively small percentage of such events, large numbers of people will be saved suffering and community health and long-term costs considerably reduced. A particular point of importance

for planners in devising strategies to avoid falls is that some environmental hazards can be very difficult to reduce. Elderly people in community studies have been found to trip over objects not thought previously to be potentially hazardous in assessment exercises. This is likely to become ever more important with demographically ageing elderly populations, and in conjunction with physical and visual impairments and disabilities. Both vision and cognitive impairment have been associated with falls, although the main studies appear to have been of institutionalised elderly people. Satariano et al (1996) point out that imbalance is a significant problem for older people. Epidemiological studies of imbalance in the general population are few, but their study showed the likelihood of imbalance to be greatest amongst those aged 85 and over, and more common amongst women than men. As this very elderly group is the fastest growing age group in most developed countries, imbalance and its associations with limitations to activities of daily living may become a major public health problem. This poses an additional reason for domestic and neighbourhood planning to be much more sensitive to the sorts of factors that can turn imbalance to disadvantage in daily life and even to outright danger.

This therefore enhances the importance of environmental factors in the home and the community. Between one-third and one-half of falls appear to be due to micro-environmental factors (floor obstacles, rugs, uneven surfaces and the like). Inappropriate or poor lighting can be significant although inappropriate footwear appears less important. Whilst stairs are involved in a number of falls, but accident and emergency studies show almost half of falls occur on the same level, suggesting other design factors are important. In terms of prevention of falls, most of the literature cites issues connected with individuals rather than with neighbourhood and housing design (Lilley et al, 1995). This certainly suggests an area of work and certainly of the extent to which fears of falls make people stay within their own homes and minimise their interaction with their localities (which could certainly lead to loss of roles and activities).

Road traffic accidents are important to all age groups and many can be avoided with appropriate environmental design and traffic control measures. Elderly people are involved in RTAs as drivers, passengers and pedestrians. In Britain, motor vehicle accidents are the leading cause of accidental death for people aged 65-74 and, after falls, the second highest cause of death for those aged 75-plus. Elderly people injured in road accidents are three times more likely than are younger people to be killed. Studies in other countries also confirm similar high rates of elderly people

amongst pedestrian deaths (Harrell, 1996). In Great Britain in 1989, more than a fifth of car drivers and almost half of the pedestrians killed were aged 60 and over. Whilst there are relatively fewer older drivers and they have relatively few accidents, elderly drivers experience more fatal accidents per mile driven than other age groups. Elderly drivers and car occupants are generally more seriously injured for a given crash exposure than younger adults and they are hospitalised for a longer time for a given injury and have more disabling injuries. With respect to pedestrian accidents, in spite of a general reduction in the number of casualties and deaths in most developed countries over recent years, the number of such accidents involving older people remains higher than in other age groups.

The majority of pedestrian accidents involve people on shopping trips, an obvious source of daily activities for elderly households. Indeed, elderly pedestrians have been shown to have a casualty rate two to three times higher than that of younger adults. Even relatively minor injuries to older people can seriously affect their quality of life and may lead to an inability to remain living in their own home. It is clear that vehicle and local road and traffic circulation design are crucial with respect to decreasing both driver and pedestrian accidents involving elderly (and other) groups. Well segregated traffic and pedestrians, low traffic densities and well signed road systems can all help avoid these accidents. It is notable, of course, that many Asian cities, including Hong Kong, have dense traffic, often difficult road conditions, numerous pedestrians and multiple directional and advertising signs, which some have suggested may be disorientating to elderly drivers (Coleman, 1993). Relatively simple factors such as traffic light intervals being set too fast to allow slower-moving people to cross the road can isolate and frustrate urban pedestrians, especially those with slow or restricted movement. However, in a Canadian study, older pedestrians over fifty were noted to be the most cautious at signal-controlled intersections, quite aware of traffic and especially careful under dangerous traffic conditions (Harrell, 1996). Traffic flows in the Canadian study were apparently much lower than those normally experienced in Asian cities such as Hong Kong so, even if elderly pedestrians are careful in these cities, they will still be at considerable risk from passing traffic. In many ways, transport must be one of the key areas to evaluate and plan carefully, as it has the capability of affecting social integration and providing access to life-sustaining functions. It is clearly crucial as a component of satisfaction and independence in later life (Sylvestre, 1996).

Personal mobility is crucial to all ages but, at times, urban transport policies have been detrimental to this. For example, a lack of connections between modes of transport, time-tabling mismatches and the like can deter use of public transport. More critical may be the difficulties of accessing buses, minibuses and underground raid transit systems for older people. In this respect, Hong Kong's Mass Transit Railway (MTR), the London Underground, New York Subway and the like all tend to have extensive reliance on escalator and stairways which can be very worrying to people with visual or physical problems. Steps onto and off buses, and the problems of crossing roads to reach bus stops can also be "environmental barriers" to elderly people and much greater consideration and co-ordination in terms of design and planning is needed.

However, some local environmental schemes can be helpful, including traffic calming measures, pedestrianisation and other traffic-personnel segregating schemes, to name a few. Whilst there are relatively few specific examples highlighting effects on elderly people, town centre redevelopment can improve the situation. Smith (1994) reports surveys before and after pedestrianisation and improvement schemes in Kingston upon Thames, London. By and large, dissatisfaction with various aspects off traffic control, signposting and other facilities dropped considerably after the redevelopment. However, significant problems did remain for disabled and elderly people, and "orange badge" (disabled parking permit) holders. There were considerable reductions in the numbers experiencing problems with narrow or obstructed pavements, which is an indicator of some success in the schemes.

Can Local "Elderly Friendly" Spatial Planning be Achieved?

Many planning questions revolve around whether the urban environment under discussion is existing or newly planned and newly built. The former will of course have existing constraints although some of these may be overcome, for example, during comprehensive urban development and urban renewal. The latter have much more scope for enhancing the "elderly friendly" attributes. Hong Kong and a few other places in the Asia-Pacific region are unusual in that they have both extensive urban renewal and new town development, which has been progressing for well over a decade (see, for example, Phillips and Yeh, 1987). This often incorporates extensive mass transport systems. However, the extent to which any places have specifically taken advantage of their rebuild or new build schemes to foster elderly friendly environments is not clear.

A study by Teo (1997) in Singapore found relatively poor integration of various aspects of the lives of elderly people from the point of view of the services and activities they would like to access. She suggests that the Singaporean policies on spatial planning have been at best partially successful. The concept of the shaping of opportunities for elderly people by the nature of the services provided is discussed. By exclusion, these operate when, for example, there are no day-care centres in the older estates where many older people live; by contrast, there has been the setting up of senior citizens' corners in other estates. Teo's Singaporean study supports the need for more research on how elderly people interact with their environments. For example, she found that, in the study of Tampines (a 1980s new town) and Bukit Merah (a 1960s estate), formal provision for elderly people was not generally as popular, as their wish was to congregate in informal settings. They preferred to participate in their own spontaneous activities rather than those organised by the community centres, the residents' committees or citizens' consultative committees.

The Singapore study illustrates the potential danger at the local environmental level of splitting the services into health and social types and separating them into spatial settings that are both formal and institutionalised. The state may thereby inadvertently separate the public and private domains of elderly persons. Barriers are created and this runs contrary to findings that suggest a linking of the two in later life. The barriers may also underpin a low take-up found of many of the social services. In many ways these may be analogous to the physical street barriers and gates in many United States and other cities (Jones and Lowrey, 1995) which can certainly be daunting and problematic for elderly people. The fact that some barriers may be policy related reinforces the need for integrated social policy as well as physical planning.

Crucial Issues in the External Environment

It is the wider community itself within which the retired person is located that may be crucial to successful ageing in place. The better the goodness of "fit" between the individual and his or her home (the internal environment) and the wider community (the external environment), the better is likely to be the individual's well-being, and that of the immediate family and support network. In addition, if the local environment provides good accessibility to services such as health and welfare facilities, it is highly likely to enhance utilization (Joseph and Phillips, 1984; Imrie, 1996). Golledge and Stimson (1997) provide useful summary tables of physical and human interaction barriers for disabled people. These include barriers

that affect visually impaired individuals, wheelchair users, aged people, those with various physical disabilities and phobias. Human interaction barriers can impinge on those with visual, hearing, learning, physical and other disabilities and can include design, layout and signposting in urban environments. It is clear that many of the barriers in local environment will be of considerable importance to elderly people who have somewhat reduced mobility and speed of movement and perhaps poorer eyesight. Many of the features are amenable to improvement and their deleterious effects can certainly be minimised by careful integrated neighbourhood planning and design.

This review suggests the following factors are crucial in providing a suitable external environment for elderly people:

1. Physical aspects (lack of uneven surfaces; stairways minimised; escalators with good hand grips provided; gradients minimised)

2. Services - range, social and physical accessibility and price of services provided in the locality, especially within walking distance

3. Accessible and affordable transport - local and wider connections

4. Safety and security for people to go out and about - a basis for psychological support

5. Community facilities - social centres, clubs, open spaces, meeting places and sources of informal support contacts

6. Enhancing interlinkages between all of the above: the *key* issue

Some of these features are physical, others social and behavioural. It seems that it is the extensive range that makes it difficult to plan comprehensively for local "elderly friendly" environments. Existing local provision and circumstances vary; local topographies in particular differ; demographic compositions vary and change. A huge variety of providers is involved, from the public sector, the private sector, varying levels of jurisdiction and different authorities and departments. Most importantly, the local neighbourhood has to serve a range of population needs: it has to be functional and flexible, unlike the more specialised institutions or retirement communities. Neighbourhoods have temporal aspects and their social and economic usage can vary according to time of day and day of the week. The residents have their own group and individual temporal activities, all of which make the programming of activities and services

very difficult. However, this should not discourage attempts to do something positive in terms of the neighbourhood planning.

CONCLUSIONS

Theoretical propositions as well as empirical research support the need to attain an integrated approach to environment, design and their interaction with behaviour. One of the most important aims is to develop integration, collaboration and co-operation amongst the many professions and groups involved in planning and providing services and facilities. This involves co-operation between public and private sector participants and the user groups - elderly people and their carers. Garland (1993, p.149) targets areas for improved theory and practices. He particularly suggests that research needs to be conducted to increase, first, the understanding of older people's experiences of everyday environments. Secondly, the development of more flexible multivariate approaches to assessing the interaction between behaviour and environments is also essential. Third, and perhaps of greater practical importance, is the imperative of developing more effective means of intervening in service systems and support networks (of all types and sectors). This will promote the rights and responsibilities of older people and their carers not only in theory but also in practice.

Spatial and environmental planning for ageing populations in most countries is novel and in many ways a learning experience. It is relatively rare for planners and developers to be able to start with a "clean slate" so that they can decide early on how to integrate services and activities in an efficient and safe manner. More usually, they have to deal with urban redevelopment or organically growing communities. It is therefore sometimes difficult to develop "beyond disabling environments" (Imrie, 1996).

Hong Kong has over recent decades been in the fortunate position of having new urban areas under development and existing and forthcoming urban redevelopment schemes, in which new local environments could be imaginatively planned. However, it has been said that having an Executive-led government, in which civil servants make departmentally-based planning decisions, has militated against comprehensive environmental planning in many fields in Hong Kong. Nevertheless, thought and expenditure at the planning stage are likely to be repaid in social and economic terms many times. They may help avoid accidents (costly surgical repairs, physiotherapy, prolonged in-patient care and institutionalization) and, by providing a higher quality of life, lead to better morale and lower

incidence of depression and the incidence of socio-psychological problems. They should also enhance care in the community by enabling elderly people to live longer and more easily in their own homes in the future. Disengagement theorists apart, research has consistently demonstrated the synergistic benefits in terms of health, morale and activity of people being able to engage in activities safely and with minimum inconvenience (Atchley, 1991; Garland, 1993).

Planners face a number of dilemmas or issues in the more holistic planning of local environments to take account of the current and *future* needs of ageing populations. A first and often almost insurmountable issue is the range of actors, providers and agencies, public and private, involved. This inevitably makes complex any co-ordination and inter-agency work. Secondly, as Madanipour (1996) notes, there are very different understandings and usage of the concept of space and its interrelations with behaviour amongst the various professions; social scientists, urban planners, architects, designers and also, it should be noted, community and health care providers. He suggests a common platform is needed, a concept of space which would refer to its objective, physical attributes, as well as its social, psychological and dynamic considerations. This he believes can only be achieved by monitoring the way space is being made and remade, at the intersection of the development process and everyday life. The current review shows the complexities of this undertaking. Third, the probable levels of dependency and support needed by future generations of elderly people, who may live much longer than their forebears, are difficult to predict. However, these problems are challenges and should not prevent all parties involved for striving to reach an understanding and appreciation of the relationships between local space and the nature of the environment in which elderly people find themselves.

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3

Housing and Environmental Issues for Elderly People - A Health and Functional Perspective

Edward M. F. LEUNG

INTRODUCTION

Hong Kong is a rapidly ageing society. In the year 1996, 10 percent of the population were already aged 65 and above. It is projected that the 65-plus population will rise to 12.5 percent (one million people) in 2016 and reach a peak of 19.5 percent in 2036 (Table 3.1). With this rapidly ageing population structure, there is an urgent need to review the issues related to the impacts of ageing. The issue of provision of housing for elderly people has been an important agenda for the Hong Kong Housing Authority for the past 10 years. Coupled with housing provision, concern over the physical, functional and social aspects of the environment in which elderly people live will be issues that the Hong Kong Community need to address in the coming years.

The mere provision of shelter without the necessary supporting environment for elderly people will lead to problems that will not be easily handled. In view of rapid urban redevelopment in the years to come, planners and policy makers need to aware of the importance of the assessment of elderly people's needs in the community. Planning should also take into the consideration of the multiplicity of needs of elderly people living in the community. This usually requires close inter-departmental co-operation in the planning and implementation of programmes. The present chapter will review the policy developments in elderly services in Hong Kong and the changing profiles and characteristics of elderly people in Hong Kong with particular reference to the health and

functional status. The special needs of elderly people in their living environments will be outlined in the light of these changing profiles. The risks and hazards posed by an inhospitable environment will be also discussed. Policy implications as a result of the above-mentioned will also be discussed and recommendations will be suggested. These factual and policy issues form a background against which following chapters in this volume may be viewed.

Table 3.1   Hong Kong: Projections of the Population Aged 65 and Above

Year	1994	1996	2016	2036	2056
Age 65+	560,000	610,000	1,000,000	1,900,000	2,200,000
Percentage of total population	9.5%	10%	12.5%	19.5%	18.5%

Source: Hong Kong Government, 1994b

POLICY INITIATIVES ON ELDERLY CARE IN HONG KONG

Before the 1970s, care for elderly people in Hong Kong was mainly provided by the family and charitable organizations. The government's policy towards care of elderly people has only been evident since 1972 when the report on 'Services for the Elderly' was released. Since then, a number of policy documents have been published with respect to various aspect of elderly care. The first programme plan on the theme was published in 1976. Most service programmes were then based on this document. In the same year, the Hong Kong Council of Social Service published its report on the needs of elderly people in Hong Kong. In the next year, 1977, the government for the first time published for public consultation a Green Paper on Services for Elderly Care. However, no official white paper was published after the consultation period. The official policy directive on elderly care in Hong Kong was announced in the 1979 White Paper on social welfare. This indicated that "Care in the Community" was to be the direction of Elderly Care in Hong Kong. A Revised Programme Plan for Elderly Services was published in 1982. At the request of NGOs in the 1980s, a Central Committee on Services for Elderly was convened by the Hong Kong Government to review services for this group. In 1989, a report on Housing for Elderly People was produced by the Housing Authority and this announced major

changes in housing policy towards elderly people. In 1994, the Hong Kong Government appointed a working group on elderly care. In the same year, a consultation document was released by the government on the Old Age Pension Scheme. With the transfer of sovereignty in 1997, the Chief Executive of the Hong Kong SAR has for the first time appointed an Elderly Commission to have an ongoing oversight of issues of elderly care in Hong Kong. The past twenty years of development of elderly services in Hong Kong have indeed witnessed an increasing need for government intervention in this sphere.

One of the main themes of elderly care in Hong Kong, proposed in the 1994 report by the Working Group on Care for Elderly, is:

" Ageing in Place - Care in the Community: appropriate support should be provided for older persons and their families to allow old people to grow old in their home environment with minimal disruption "

Under this basic working principle, the issue of environmental measures becomes particular important. How can an environment be created that can enable elderly people to stay in the community for as long as they wish and are able?

THE CHANGING PROFILE AND CHARACTERISTICS OF ELDERLY PEOPLE IN HONG KONG

Given the importance of planning in a modern society, it should take into account the changing physical characteristics and other trends in the population. Hong Kong has undergone tremendous change in the past 50 years both in the areas of economic and socio-political development. The impact of modernization and urbanization, very evident in the new towns, has brought about major socio-economic transformation. The tradition of filial piety in a Chinese culture has also been affected by changing life styles and city life. Rational planning would take into consideration the changing culture of the society, especially when elderly care has a strong, officially recognised, social basis. In addition, the environmental changes should ideally also facilitate the traditional caring roles of family for elderly people.

Current research in Hong Kong has shown a number of important characteristics of elderly people. These include the increasing relative and absolute proportions of old-old population, widowhood, changing living status, falling employment rates, chronic ill health, functional limitation and cognitive impairment.

Table 3.2   **Hong Kong: Elderly Population by Age and Sex, 1981-2011**

Age Group	1981 M	1981 F	1991 M	1991 F	2001 M	2001 F	2011 M	2011 F
60-64	90,725	89,484	120,266	114,595	127,000	105,600	201,500	176,600
65-74	103,319	126,376	151,458	168,565	215,100	208,300	217,700	186,700
75-84	26,049	55,790	53,498	79,756	95,800	126,200	135,500	154,100
85+	3,225	12,050	6,919	21,844	19,100	40,700	34,100	66,200

Source: Hong Kong Government, 1994a

As noted earlier, Hong Kong has entered the phase of rapid population ageing. More importantly, the growth of old-old population, those aged 75 years and older, calls for particular concern in the planning of housing and service programmes. Table 3.2 indicates that the number of elderly people over age of 85 will increase by fourfold from 1991 to 2011. The rise in the number of old-old in the population will require considerable alteration in the environment and provision of programmes.

In the process of population ageing and increasing life expectancy and especially the differential mortality rates between males and females, marital status will be of particular concern. As shown in Table 3.3, in 1991, some 30 percent of elderly people were widowed and, among female elderly people, the percentage of widowhood was 44 percent. The high proportion of elderly people especially female subjects who are widowed is in fact alarming. It is likely to lead to considerable increases in terms of need for social support and care for those who are widowed and who may become disabled.

Table 3.3   Hong Kong: Marital Status of the Population Aged 60 and Above by Sex, 1991

Marital Status	Male	Female	Total
Never married	16,665 (5.0%)	17,021 (4.4%)	33,686 (4.7%)
Married	271,308 (81.7%)	191,806 (49.9%)	463,114 (64.6%)
Widowed	39,382 (11.9%)	170,243 (44.2%)	209,625 (29.2%)
Divorced/separated	4,786 (1.4%)	5,690 (1.5%)	10,476 (1.5%)
Total	**332,141 (100%)**	**384,760 (100%)**	**716,901 (100%)**

Source: Hong Kong Government, 1994a

Associated with the rising proportion of widowhood amongst elderly people, living arrangements will again be of concern to planners. In 1991, 10 percent of elderly people were living alone and 12 percent were living with their spouse only (Table 3.4). Therefore, a total of 22 percent of elderly people were living in a potentially weak supporting network. The arrangement of environmental support for this group of elderly people is

Table 3. 4   Hong Kong: Elderly People's Living Arrangements by Age, 1991

Living Arrangement	Age Group					
	60-64	65-74	75-84	85 and over	Total	%
Living alone	17,536	33,345	19,098	3,184	73,163	(10.9%)
Living with spouse only	26,339	41,262	13,245	1,077	81,923	(12.2%)
Living with children only	22,136	30,131	8,983	1,571	62,821	(9.3%)
Living with spouse and children only	86,990	71,836	11,621	527	170,974	(25.4%)
Living with other persons (no spouse or children)	11,864	21,639	14,662	4,038	52,203	(7.8%)
Living with spouse and other persons (no children)	5,724	9,302	3,340	347	18,713	(2.8%)
Living with children and other persons (no spouse)	20,788	52,618	34,044	9,502	116,952	(17.4%)
Living with spouse and children and other persons	37,098	45,363	12,782	1,204	96,447	(14.3%)
Total	**228,475**	**305,496**	**117,775**	**21,450**	**673,196**	**(100%)**

Source: Hong Kong Government, 1994a

therefore particular important to reduce the risk of accidents and ill health. A proper surveillance of people in this group is likely to help in future risk management. It might help avoid incidents such as the sudden surge of suspected hypothermia-induced deaths amongst elderly people living in poor housing conditions during the cold spell of early 1996.

Apart from developing social networks that could significantly affect the potential risk of elderly people living in the community, their financial circumstances are also of concern. With the change in economic structures over the past 20 years, there has been tremendous change in the job opportunities for elderly people. It is evident that there is a trend towards a progressive reduction in labour-force participation among elderly people. The percentage of elderly people aged between 60 and 64 who are participating in the workforce fell from 46.5 percent in 1971 to 37 percent in 1991. For those aged over 65, the labour force participation rate dropped yet more significantly from 21 percent in 1971 to 13.8 percent in 1991 (Table 3.5). The percentage of elderly women's participation in the labour force was even lower (Table 3.6). Only 19 percent of elderly women aged between 60 and 64 were employed. In a society such as Hong Kong which lacks a comprehensive retirement pension scheme, the trend towards a reduction in labour force participation is alarming. Elderly people without employment opportunities will potentially live in adverse circumstances, in poverty and isolation. The creation of job opportunities in their living environments will at any rate facilitate productive ageing and enhance the economic and possibly personal esteem of those able to work. Of course, many older people are unable to work and policies for the economic and other support of these people are particularly urgently needed.

Whether elderly people are able to live independently in the community depends very much on their health, mobility and functional status. Although Hong Kong enjoys one of the highest life expectancies in the world, the health status of its elderly citizens may not be correspondingly better. According to one survey in Kwun Tong District, there has been a rapidly rising trend of chronic illnesses amongst elderly people in comparison with rest of the population (Leung and Lau, 1996). The prevalence of back problems, hypertension, diabetes and rheumatism amongst elderly people were much higher than in the younger population (Table 3.7). Another study amongst elderly people attending elderly centres throughout the territory of Hong Kong has shown that rheumatism (34 percent), hypertension (32 percent), fractures (17 percent), peptic ulcer (13 percent)

Table 3.5   **Hong Kong: The Proportion of Working People in the Elderly Population by Age, 1971-1991**

Year	Elderly Population	Number of Elderly Working Persons	Elderly Working Persons as a Percentage of Elderly Population
60-64 Age group			
1971	115,701	53,803	46.5%
1976	155,380	67,230	43.3%
1981	180,209	83,472	46.3%
1986	209,614	84,872	40.5%
1991	234,861	86,966	37.0%
65+ Age group			
1971	177,572	38,436	21.6%
1976	242,800	48,520	20.0%
1981	326,809	76,288	23.3%
1986	408,542	75,935	18.6%
1991	482,040	66,419	13.8%

Source: Hong Kong Government, 1994a

Table 3.6   **Hong Kong: Labour Force Participation Rates of the Elderly Population by Age and Sex, 1991**

Age Group	Male (%)	Female (%)	Total (%)
60-64	56.3	19.2	38.2
65-74	28.1	10.3	18.7
75-84	9.6	3.5	5.9
85+	4.4	0.7	1.6
Total	**34.8**	**11.0**	**22.0**

Source: Hong Kong Government, 1994a

Table 3.7   Kwun Tong District Study: Distribution of Chronic Diseases by Age and Sex, 1996

Diagnosis	< 18		18-39		40-64		>65	
	M	F	M	F	M	F	M	F
Back Pain	0.4	0.0	0.4	1.4	9.5	13.0	24.9	34.5
Hypertension	0.0	0.0	0.4	0.6	7.2	12.4	17.8	26.9
Rheumatism	0.2	0.2	1.3	2.2	6.9	7.8	7.5	14.1
Diabetes	0.0	0.0	0.0	0.2	2.2	4.9	6.1	12.0
Skin Problem	0.8	0.4	0.8	1.2	1.9	1.5	2.8	2.4
Peptic Ulcer	0.0	0.4	1.1	0.7	2.0	1.6	1.9	0.8
Headache	0.0	0.7	0.5	1.2	1.4	2.4	1.4	1.6
Asthma	1.4	1.6	0.7	0.4	0.5	1.3	4.2	0.8
Chronic Bronchitis	0.4	0.2	0.2	0.7	0.3	1.8	3.8	2.4
Heart Disease	0.0	0.0	0.1	0.1	0.8	1.8	3.8	5.6
Cataract	0.0	0.0	0.0	0.0	0.3	1.0	3.8	1.6
Psychiatric Illness	0.0	0.0	0.1	0.5	0.6	1.1	0.0	0.0
Stroke	0.0	0.0	0.0	0.0	0.3	0.0	3.8	1.6
Deafness	0.0	0.0	0.0	0.0	0.2	0.3	3.3	1.6
Thyroid Disease	0.0	0.2	0.1	0.9	0.0	0.8	0.5	0.0

Source: Leung and Lau, 1996

Table 3.8   Hong Kong: Prevalence of Chronic Illnesses amongst Elderly People

Illness	Number	Percentage
Rheumatism	504	34.2
Hypertension	474	32.2
Fracture	205	17.1
Peptic ulcer	198	13.5
Diabetes mellitus	158	10.7
Chronic bronchitis	120	8.2
Coronary heart disease	100	6.8
Hyperthyroidism	89	6.1
Urinary incontinence	72	4.9
Stroke	55	3.8
Faecal incontinence	43	2.9
Hyperparathyroidism	21	1.4

Source: Leung and Lo, 1997

and diabetes mellitus (10 percent) were the most common chronic illnesses amongst elderly people in Hong Kong (Leung and Lo, 1997) (Table 3.8).

Functional limitations are another important barrier to independent living for elderly people. Functional limitations amongst elderly people are common in Hong Kong (Leung and Lo, 1997). Indeed, according to the survey by Leung and Lo, 37 percent of elderly people had difficulties in doing heavy housework and 16 percent of them had difficulties in climbing stairs. Another 7.6 percent of elderly people had difficulties in taking public transport (Table 3.9). Therefore, issues of accessibility by elderly people to services and facilities outside the home is of particular importance in preventing social isolation. Around 20 percent of elderly interviewed had impairments in two or more ADL (activities of daily living) functions (Table 3.10).

Table 3.9   Difficulties in Activities of Daily Living

Activities of Daily Living	Number	Percentage
Heavy housework	551	37.2
Stairs	248	16.8
Taking Public Transport	112	7.6
Getting up/down (bed/chair)	95	6.4
Visiting friends	91	6.1
Buying food	85	5.7
Going out	83	5.6

Source: Leung & Lo, 1997

Another important factor affecting elderly people living in their own environment is their cognitive function. Elderly people in Hong Kong have a similar prevalence of mental impairment when compared to those people in Western countries. A study by Liu et al (1993) has shown that 11 percent of elderly people have impairment of their cognitive function and the prevalence of cognitive impairment rises rapidly to 26 percent among those aged 80 years and over (Liu et al, 1993) (Table 3.11).

Table 3.10   Number of Impairments in Activities of Daily Living

Number of Impairments	Number of Respondents	Percentage
0	795	53.7
1	377	25.5
2	123	8.3
3	65	4.4
4	39	2.6
5	22	1.5
6	12	0.8
7	7	0.5
8	5	0.3
9	2	0.1
10	4	0.3
11	2	0.1
12	2	0.1
13	2	0.1
14	4	0.3
15	19	1.3

Source: Leung and Lo, 1997

THE NEEDS OF ELDERLY PEOPLE IN THEIR EVERYDAY ENVIRONMENT

As evidenced in the last section, elderly people have a multiplicity of needs. To enable elderly people to live in their own environment, measures should be taken to ensure that their needs are being addressed in the planning and development of areas in which they will live. The followings are some suggestions as to the more important areas that need to be addressed:

1.   Employment

The maintenance of financial sufficiency for elderly people is perhaps the most important issue for an ageing population. In Western industrial countries, this has been addressed by the provision of state, private and company retirement pensions. However there is as yet no universal provision of retirement pensions for elderly people in Hong Kong. In fact, as indicated above, there is a rapidly falling rate of employment amongst elderly people. Many elderly people are living on the verge of poverty simply because they cannot find a suitable job. Therefore it is particularly important to enable elderly people to

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Table 3.11   Status of Cognitive Functioning of Persons Aged 65 and Above

	MMSE		Total
	<=20	20 +	(N)
1. Gender			
Male	6.5 %	93.5%	(963) 45.6
Female	15.1%	84.9%	(1240) 54.4%
Sample N **Total**	**(268)** **11.2%**	**(1935)** **88.8%**	**(2203)** **100.0%**
2. Age			
65-69	5.7%	94.3%	(893) 41.2%
70-74	11.1%	88.9%	(610) 29.4%
75-79	14.7%	85.3%	(375) 18.4%
80 over	26.0%	74.0%	(325) 11.0%
Sample N **Total**	**(268)** **11.2%**	**(1935)** **88.8%**	**(2203)** **100.0%**

Source: Liu et. al., 1993

take up employment if they wish and are able. The maintenance of financial viability for elderly people would reduce the likelihood of their reliance on society. In planning of the environment for elderly people we should ensure that there would be the possibility of employment opportunities within their own communities.

2.   Health care

Although Hong Kong enjoys a long life expectancy, the health of elderly people is not much different from that of their counterparts in other developed countries. Therefore, the availability of health care facilities within the local living environment would help to ensure their health needs are properly cared for. The establishment of primary

health care clinics in the locality and provision of health education and outreach services in the community would also help to ensure that high-risk elderly people would be identified early.

3. Mobility and Accessibility

The maintenance of independence through the ability to go out for social and other personal needs is crucial to the quality of life of elderly people. As shown in the studies cited above, elderly people often have difficulty in walking stairs and taking public transport. Difficulties in visiting friends, buying food and going out were also common problems amongst elderly people living in the community. The living environment needs to be designed to enable elderly people to overcome such difficulties. Solutions can include having lift access to every storey of the building, easy access to public transport for elderly people with mobility difficulties and ensuring shops and market places are of easy access.

4. Social support networks

Social isolation for high-risk elderly people living alone is particularly serious. There is the need to establish social support networks for elderly people. Some twenty percent of elderly people in the community in Hong Kong were either living alone or with their spouse only. Therefore, when there are concentrations of elderly people, attention should be paid to enhancing community support services through elderly centres and outreach services.

5. Orientation

Memory problems and dementia can occur more commonly in elderly people than other age groups. At the local scale, housing design which adopts a standard colour and appearance can present particular problems for elderly people with memory problems, in recognising their way about. Therefore, in the design of the living environment for elderly people, emphasis should be placed on providing the means to help elderly people in orientating to their external environment.

RISK AND HAZARDS FOR ELDERLY PEOPLE IN THE LIVING ENVIRONMENT

Elderly people often face higher risks and hazards than other age groups as they are more likely to suffer from physical illnesses, functional

impairment, cognitive impairment and social isolation. Therefore, the recognition of the potential risks to elderly people is particularly important for the planning of the environment.

1. Falls

One of the most common accidents that elderly people face in their living environment is the hazard of falls. A number of factors, both environmental and physical, can predispose elderly people to falls. Falls are potentially serious in elderly people because they may result in major injuries such as intracranial haemorrhage and fractures, with the direct consequences of death and disability. Therefore, the prevention of falls is particularly important. Measures should be taken to reduce fall hazards among elderly people. As discussed in chapter 2, common fall hazards in the environment include stairs, bathroom, toilet and kerbs.

2. Urban redevelopment and migration

Rapid urban redevelopment programmes and relocation potentially cause numerous problems for elderly people who have to readjust to a new environment especially when the relocation is outside their original district. Relocation of elderly people can be positive but can cause disruption to their existing social networks and difficulties often develop as elderly people will need to learn a new, unfamiliar environment. This frequently results in loss of independence and reliance on institutional care. In the urban redevelopment programmes and relocation for elderly people, caution should be exercised to cause as little disruption as possible to normal living patterns and support of elderly people in the environment.

A SUITABLE FUTURE ENVIRONMENT FOR ELDERLY PEOPLE

In considering the development of an appropriate environment for elderly people, we need to develop a set of policy initiatives that could encourage elderly people to live with dignity. The needs of elderly people are multiple in terms of their requirements for housing, social support, health care and financial support and, most importantly, family care. To enable Hong Kong's elderly population to live in dignity and independence, an integrative environment needs to be created. This would comprise opportunities for productivity among those older people who wish it, the necessary financial support in old age, accessibility of older people to

community resources including health care and social care and the provision of supporting networks within easy reach of elderly people. Co-operation among government policy makers, service providers in the fields of housing, social welfare, primary health care and hospital care within the local community, and with the private sector, will all enhance the support and quality of life of elderly people.

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4

Housing and Environmental Needs of Elderly People in Hong Kong

Nelson W. S. CHOW

THE ENVIRONMENTAL NEEDS OF HONG KONG'S ELDERLY PEOPLE

The development of social services for elderly people has only a short history in Hong Kong. It began in the late 1970s when the then Hong Kong Government published a Green Paper in November 1977 on the development of services for the elderly (Hong Kong Government, 1977). The recommendations of the Green Paper were later incorporated in a White Paper on social welfare published in April 1979 (Hong Kong Government, 1979). In the past nearly 20 years, although the provision of social services for the elderly people has constantly been reviewed and improved, the development of the appropriate social services has deviated little from the stipulations of the 1979 White Paper, including the recommendations of a Working Group set up in 1994 on care for the elderly (Working Group on Care for the Elderly, 1994).

In brief, the policy governing the development of social services for the elderly people in Hong Kong is one based on the principle of "care in the community". This was first spelled out in a report of a Working Party set up in 1972 on the future needs of the elderly. According to the report, the term *"care in the community"* meant that *"services should be aimed at enabling the elderly to remain as long as possible as members of the community at large, either living by themselves or with members of the family, rather than at providing the elderly with care in residential institutions outside the community to which they are accustomed"* (Working

Party on the Future Needs of the Elderly, 1973, p.15). When the *"care in the community"* approach was proposed, the Working Party frankly admitted that they *"looked for solutions which ....cost less, would make least demand on scarce manpower resources and which could be implemented reasonably quickly...."* (Working Party on the Future Needs of the Elderly, 1973, p.15). In short, they wanted to minimize the necessity of residential care for elderly people.

Conceptually, few objections can be raised to the "care in the community" approach and few will question the general aims of community care policies. These have been outlined as *"to maintain a person's link with family and friends and normal life, and to offer the support that meets his or her particular needs"* (Department of Heath and Social Security, 1981). However, the question which needs to be asked is: Are elderly people actually leading a better quality of life when they are encouraged to stay in the community for as long as possible?

As Little pointed out, *"While lip service is given to the value of community living for the elderly, home-delivered services to supplement family care are in most countries seriously deficient"* (Little, 1979, p.10). In fact, the "community care" approach, when carried out elsewhere in the world, has often been criticized as promising more than it can actually achieve (Walker, 1987).

In implementing the "care in the community" policy, the Hong Kong Government has since 1979 been developing a wide range of community support services for elderly people and their carers. These include community nursing, home helps, day care, laundry and canteen services, social and recreational activities, hostel accommodation, health education and respite care. Although the community support services provided for elderly people are performing the role of helping the latter to remain in the community, they have been found to be insufficient to meet demand. In other words, only a small proportion of the elderly people whose needs are greatest are receiving the necessary support; the rest would often have to depend on their family members or simply do without any form of assistance (Chow, 1993).

However, as long as the "care in the community" policy remains, with apparently no better an alternative to replace it, the great majority of the elderly people in need of care will have to continue living in the community. It is hence important to ensure that those living in the community are able to satisfy their own housing needs, as well as other needs relating to living

in the community. Furthermore, it should be pointed out that the satisfaction of the housing needs of the elderly people is closely related to their living arrangements, which in turn determines the support which they receive from others (Chi and Chow, 1997). While the relationship between living arrangements and support of elderly people will be examined later, it suffices to point out here that the housing needs of the elderly people have often been perceived as no more than a simple matter of building an adequate number of accommodation units.

It is argued here that the housing needs of the elderly people should be enlarged to include the *environment* within which the elderly people live. The environment of the elderly people is perceived to consist of two main parts: physical and social. The physical part centres around the housing units in which elderly people stay and includes both the public facilities and the social services available in the community to enhance a congenial manner of life for the old. The social part consists of the social networks that elderly people maintain as a result of living in their housing units. It has to be acknowledged that the concept of the environment is not easy to define. However, it is certainly a mistake to conceive the housing needs of elderly people as consisting only of having a place in which to stay and that these needs can easily be met by providing more units.

So far as planning is concerned, it is definitely important for the Hong Kong Government to adopt a broad perspective on the needs of the elderly people. Recent official reports indicate that the improvement of the quality of life of the people has now become a primary concern. In the Territorial Development Strategy (TDS) Review published in 1996, it was explicitly stated that *"Hong Kong must have an up-to-date physical planning framework to guide development and investment, to ensure the efficient use of resources and to promote a high quality of living and working environment"* (Planning, Environment and Lands Branch, 1996, p.3). Similar objectives can also be found in the Consultation Paper on the Town Planning Bill, issued in the same year, which stated that town planning must represent an attempt to *"bring about a better organized, more efficient and more pleasant place in which to live and to work"* (Hong Kong Government, 1996, Introduction).

Although the meaning of *"a high quality of living and working environment"* or what constitutes a *"more pleasant place in which to live and to work"* have not been spelt out in concrete terms, planning is now obviously larger than the building of houses. In fact, the 1996 TDS Review clearly stated that any planning must *"balance the prescribed economic*

benefits of development scenarios and the related hub functions of Hong Kong, on the one hand, against, on the other, ... the aspirations of the community with regard to the style and quality of life preferred". Hence, in planning to meet the housing needs of elderly people, rather than narrowly focusing on the number of housing units required, it certainly makes sense to pay attention to the broader environmental needs of the elderly people. It must be remembered that the ultimate goal of a housing policy for the elderly people is to improve their quality of life; the provision of adequate housing units is only a means and not the end.

THE HOUSING SITUATION OF HONG KONG'S ELDERLY PEOPLE

It has already been mentioned that a policy to meet the social service needs of Hong Kong's elderly people was not formulated until the late 1970s. Attention regarding the housing needs of the elderly people has only been roused in the last decade or so when people realized that changes in the family structure had already affected the housing choice of the old and altered their housing needs. These changes included decreasing size of households and a rising trend for married children to live away from their parents. In other words, more and more elderly people were found to be living independently and far from their family members.

Since the living arrangement of Hong Kong's elderly people is admittedly an important factor in determining the extent of support they could receive, it was considered at that time that a separate housing policy regarding the elderly people should be formulated. This has resulted in the setting up of a Working Group on Housing for the Elderly in 1988 with members from both the Social Welfare Department and the Housing Department (Hong Kong Housing Authority, 1989). It was therefore an attempt to resolve, at one go, both the housing and the welfare needs of the elderly people. The Working Group accepted that the trend for more elderly people to live independently has definitely been set and that their demand for separate housing units would increase. However, the Working Group also saw the advantage to be gained if children could be encouraged, through the design of appropriate housing policies, to continue living with their elderly parents.

Whether or not grown up children should be encouraged to live with their elderly parents is an issue often debated in Hong Kong (Ngan, 1990). Those who favour a more independent living arrangement for the elderly people often stress that families are no longer functioning as care providers

and that elderly people would probably be better off if they could live independently while assisted by formal services. They would also criticize the "care in the community" approach adopted in Hong Kong as being only an excuse for the government for not providing the necessary services for the elderly. On the other hand, those who argue for a policy to encourage elderly people to live with their children or, at least, close to them, would point out that formal services are usually inadequate and that families still remain, without any dispute, the major source of help to elderly people in need of assistance. They therefore consider it important to uphold the traditional function of the family system as a care provider and to encourage, as far as possible, the continuation of the practice of co-residence. There is probably no ready answer to the above debate.

As for the actual housing situation of the elderly people in Hong Kong, about 4 percent are living in various kinds of institutions and 24 percent either alone or with another unrelated elderly person. Of the remaining 72 percent living with other family members, one-third are with their spouse. These figures suggest that while more elderly people are now living on their own, the majority are still residing with their family members. Instead of dwelling on the debate as to whether or not elderly people should live with their families, it would be more fruitful to concentrate on ways to improve their quality of life.

THE QUALITY OF LIFE OF ELDERLY PEOPLE

The concept of quality of life had only been used in Hong Kong in recent years when a set of social indicators was constructed to measure the pace of development of the Hong Kong society. The social scientists constructing the social indicators found that *"the measure of the individual's quality of life has always occupied an important role in the development of social indicators studies"* (Wan, 1992, p.172). As a result, two major approaches were proposed to conceptualize the measurement of the quality of life, namely the *condition of life* and *experience of life* (Wan, 1992, p.172). The condition of life is easier to understand as it is perceived to involve mainly the identification of a number of situations considered to be essential to a "good" life, such as the level of income, and housing and health conditions. The experience of life is described as a subjective approach that aims at measuring the feelings of the people about their own life conditions.

Other than the framework proposed in the social indicators studies, Liu, in a discussion of the construction of quality of life indicators, put forward three approaches to define the concept (Liu, 1976):

1. Precise definition of what constitutes the quality of life, for example, happiness, satisfaction and so on.

2. Definition through the employment of specific types of objective and subjective indicators, for example, health and welfare indicators, educational indicators, environmental indicators and so on.

3. Indirect definition by specification of variables or factors affecting the quality of life, for example, a group of social, economic, political and environmental indicators represented by different types of composite indexes.

Of the above three approaches, the third appears to be most relevant to the present discussion on the quality of life of the elderly people. It is also not unlike the attempt, as emphasized in the social indicators studies, to measure the condition of life of the people. The approach goes one step further in stating that one needs to find out the factors or variables affecting the condition.

In summary, what is being proposed here is that if the aim is to improve the overall quality of life of the elderly people who are living in the community, then the emphasis must be placed on creating an environment in which elderly people can lead a satisfying life (Chow, 1996). To meet the housing needs of elderly people, albeit important, could only be described as part of the goal. The following discussion will first define, in more specific terms, the environmental needs of the elderly people and then consider the ways and means which could be employed in our existing planning mechanisms to satisfy these needs.

THE ENVIRONMENTAL NEEDS OF ELDERLY PEOPLE

It has been noted that the environmental needs of elderly people fall into two main areas: physical and social.

Physical Aspects

1. A housing unit which allows the elderly people, whether living alone or with other people in the same household, enough space to maintain an independent life, without having to intrude into the life of others.

2. Easy access to public transport so that elderly people can maintain their mobility and avoid being confined to their own districts.

3. The availability of social services to the elderly people so as to maintain a healthy living. These services include social centres for the elderly, health clinics and various kinds of home-based support services.

4. Recreational grounds and open space with facilities suitable for elderly people.

Social Aspects

1. A choice of living arrangements which allows the elderly people to maintain a harmonious relationship with their family members and to avoid possible conflicts.

2. An opportunity to interact with neighbours and to build up a relationship characterized by mutual-help and care.

3. The development of a community that pays attention to the needs of the elderly people and takes them as full members of the community with their own rights and responsibilities.

4. The cultivation of a community spirit that respects the elderly people.

There is no doubt that the two aspects closely influence one another. For example, if housing units are short in supply, elderly people would hardly have the opportunity to choose the kind of living arrangement they prefer. Again, if social services are not available to assist families to take care of their frail elderly members, a harmonious relationship could hardly be maintained within the family.

WAYS AND MEANS OF SATISFYING THE ENVIRONMENTAL NEEDS OF ELDERLY PEOPLE

Once we accept that planning should aim at satisfying the environmental needs of the elderly people, the following changes must be made to the existing planning mechanism:

1. Attention must be paid to the special needs of the elderly people. Planning in the past has often neglected the needs of the elderly people. I need only give two examples to illustrate. I always wonder, when I grow old, whether I would still be able to make use of the public transport system we have in Hong Kong. I would probably find the

buses a bit dangerous for anyone who could not jump in and out like a young person, leaving me perhaps to rely on the tram service if I would be lucky enough to live on the Hong Kong Island. Other than public transport, our public housing estates have always been designed for a young population. Hence, football and basketball pitches are a must in all public housing estates, although when you care to visit them, especially in the day time, you often find only elderly people, sitting in the sunlight and having no facilities suitable for their enjoyment. The needs of the elderly people are not difficult to find out as it requires only some careful observation.

2. Planning must be a multi-disciplinary effort between various departments providing services for the elderly people. In recent years, the government has already taken pains to ensure that any planning on the future development of services for the elderly people must involve as many relevant government departments and outside parties as possible. An example of this multi-disciplinary approach is the Working Party on Care for the Elderly set up in 1994. It had members from over 10 different policy branches, executive departments and non-governmental organizations. Another example is the recently established Commission on the Elderly which has an even larger number of both official and unofficial members. However, the day-to-day planning is still left to the Health and Welfare Bureau, which is known to have a definite sphere of influence on the life of the elderly people.

3. Planning must aim at giving the elderly people more opportunities to choose their way of life. The most obvious shortcoming of the existing effort to satisfy the environmental needs of the elderly people is the lack of choices given to them. For example, families with frail elderly members have often to choose between either sending the latter to an institution or bearing the caring responsibilities entirely on their own. This has not only resulted in a relatively high percentage of elderly people staying in an institution, but also making community care a phony policy objective.

4. Planning must look at the various services in support of elderly people as an integrated effort to improve the latter's quality of life. It has already been pointed out that the environmental needs of the elderly people must be considered as a whole, and not just their housing needs. In the past, housing units have often been allocated to elderly people without considering their need to maintain contacts with their

friends or neighbours. This in fact has made a number of elderly applicants very hesitant about accepting the offer for fear of being segregated from their familiar communities. The introduction of the Estate Liaison Officers scheme and more recently the social networking project has no doubt alleviated some of the difficulties encountered by the elderly residents, but the new efforts are only remedial in nature. It would certainly be much better if the environmental needs of the elderly people could be considered as a whole.

5. Lastly, the ultimate goal of planning for elderly people must be to create an environment in which they would feel secure and not be segregated. I have recently conducted a study on the changing role and status of the elderly people in Hong Kong and found that both the elderly people themselves and the young have a rather negative image of old age. This is rather unfortunate, especially when we consider the amount of resources that our society has put into taking care of elderly people. I think one of the reasons for this negative impression of the role and status of the elderly people is that, in planning for them, we often take them as a separate group who seem to have no need to interact with other members of society. Hence, we have special social centres for elderly people and other kinds of activities tailored for their needs. This may be necessary from an administrative point of view. However, it produces an effect of segregating elderly people from other groups and it is not surprising that they are often seen as people needing care. The study found that the elderly people wanted also to be in touch with other age groups, with society and the whole world. They knew also that only in this way could they regain other people's respect and recognition. It is obvious that our society is not providing such an environment for elderly people to integrate with other groups and exercise their rights and responsibilities.

AN IDEAL ENVIRONMENT FOR ELDERLY PEOPLE TO LIVE A BETTER LIFE QUALITY

What I have been proposing may sound somewhat ideal and some may argue that, as a society, we are not yet able to satisfy the basic needs of the elderly people who require care and assistance. There is no dispute that we have still a long way to go to meet the needs of elderly people and to provide all of them with the necessary services. However, in the course of improving the quality of life of elderly people, especially as the majority

are living in the community, it would certainly help if we were able to take a broader perspective of their needs and adopt a planning framework that aims at constructing a satisfying environment for them. This course of action does not necessarily require the allocation of additional resources; on the contrary, the approach would ensure a better deployment of existing services. What is involved is, in fact, a change in our perspective in taking the environment of elderly people into consideration and a modification in our planning methods to improve the quality of life of elderly people. Perhaps, only in this way, can we make the "care in the community" approach a success.

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5

Design of Environments for Elderly People -
An Environmental Psychological Perspective

Oi-Ling SIU

INTRODUCTION

In approaching the turn of the century, there is a growing concern for the housing needs of elderly people in Hong Kong, both from the public and private sectors. The Hong Kong Housing Authority has recognized the pressing demands of public housing for the elderly, and has revised the housing policy accordingly in recent years. In the private sector, there has been a rapid increase in private homes (Cheng, 1993; Bartlett and Phillips, 1995). In addition to quantitative increase, there is also much concern for the well-being of elderly in their local and wider living environments. Professionals and scholars have highlighted the concern for the environmental needs of elderly people, resulting in initiatives such as the special design and facilities of elderly housing. Environmental psychology is an established area of research within the discipline of psychology. It is the discipline that is concerned with the interactions and relationships between people and their environments (Proshansky, 1990; Veitch and Arkkelin, 1995). This paper provides an overview of some of the classic concerns of environmental psychology and suggests ways in which they might contribute to an understanding of elderly people's environmental needs.

Many environmental psychologists in Western countries have since the 1950s applied person-environment knowledge to study environments planned and designed for elderly people. To date, however, there have not been many similar studies conducted in the local context of Hong Kong.

The purpose of the paper is to discuss some of the theories of environmental psychology and to suggest their potential application in the design of special environments for the elderly people in Hong Kong. A brief report of six case studies of elderly people living in different types of housing in Hong Kong in Appendix 5.1 illustrates the range of levels of satisfaction that can be engendered by the environment in which people live.

PERSON-ENVIRONMENT FIT THEORY

One of the most fundamental theoretical perspectives within environmental psychology is person-environment fit theory. French and Kahn's (1962) person-environment fit theory is basically concerned about "adjustment" which is related to the "goodness of fit" between the characteristics of the person and the properties of the environment. This obviously has great potential implications for those interested in the interaction of environment and elderly residents or would-be residents. In this theory, two important categories of environmental attributes - resources and demands - and two corresponding categories of personal attributes - needs and abilities - are key concepts in person-environment interactions. It is assumed that any discrepancy between them would potentially lead to "misfit" or "strain". In their recent review, Conway et al (1992) explained that, if there is not enough environmental resources to meet personal demands, there will be lack of adjustment in individuals. It would be related to psychological and physiological strain as well as a variety of psychological coping and defensive behaviours. On the other hand, if there are excessive environmental supplies on one personal dimension (such as the need for social contacts), this might result in deficient supplies on another dimension (for example, the need for privacy).

APPLYING PERSON-ENVIRONMENT FIT THEORY TO CONTROL THEORY

This theory holds that greater feelings of control have a positive impact on psychological well-being and physical health, and a diminished sense of control has undesirable consequences. The concept of control was first introduced by Rotter (1966). The pioneer work applying control theory can be traced back to the classic study on learned helplessness conducted by Seligman and his co-workers (Seligman et al, 1975). They argued that repeated exposure to uncontrollable situations leads to inability to distinguish controllable from uncontrollable stimuli, which in turn leads to apathy and passivity. Veitch and Arkkelin (1995) even argued that in

the extreme form, loss of control can eventually lead people to give up on life, and to die.

It has been found that perceptions of control in general lead to greater endurance of aversive stimuli (Kanfer and Seider, 1973); greater feelings of control lead to greater satisfaction (Liem, 1975) and performance (Glass and Singer, 1972). Many studies have been conducted investigating the effect of sense of control amongst elderly people, in particular in nursing homes and retirement communities (Rodin, 1980; Rodin and Langer, 1977; Schulz and Hanusa, 1978, 1979; Slivinske and Fitch, 1987). In general, a perceived lack of control is associated with poorer adjustment, activity and physical health (Mancini, 1980; Parmelee, 1982; Ziegler and Reid, 1983). The concept of empowerment needs to be used with some care; the ceding of power and decision making for older service users is sometimes seen as a positive choice in itself (Myers and MacDonald, 1996).

There is the possibility of combining these two theories. In applying the person-environment fit model to control theory, Conway et al (1992) argued that, when a person's needs (such as desire for control) are greater than the environmental supplies (for example opportunities for control over rewards), a stressful state exists that produces *strain* (such as frustration, negative affect, and maladaptive behaviour). By a similar argument, if the environmental demands for personal control (such as responsibilities for others and decision making) are higher than a person's abilities or desires, this would produce *stress* due to the sense of failure. Therefore, they suggest that an individual's control orientation should be matched to the demands of the situation. To demonstrate this, Conway et al (1992) reported the results of a longitudinal study examining the relationship between desired control and outcome measures. They concluded that either *too much* or *too little* perceived control relative to the amount desired tended to be associated with more psychological *strain*. There was evidence showing that elderly people prefer low-rise building and age-segregated housing and treasure the ability to control their day-to-day lives (Devlin, 1980; Grant, 1970; Normoyle and Foley, 1988).

The implications of these studies for the design of environments for the elderly people are threefold. First, we must be aware that the aged also need personal control. In the absence of control, some elderly may develop what may be termed "learned helplessness". In recent years in Hong Kong, quite a number of poor old people who lived alone have died in the cold weather. One possible explanation might be that they might have tried hard to keep warm in the cold but, after repeated efforts, they had not

succeeded. Perhaps they did not have the resources (such as heating or heavy blankets), abilities (such as poor health condition), or help from others, and they therefore gave up in the end, and died. Therefore, special care must be given to the elderly who live alone in particular, to enable them to gain great control over their circumstances and local environments.

Second, management officials may need to relinquish a degree of organizational control, and allow a certain degree of free choice, perceived mastery or control for elderly people for whom they have some responsibility. For instance, in nursing homes, the elderly residents could be allowed to decorate their own area; to have control over the thermostats in their living environments; to have a choice of flowers and in, say, the watering of their own plants. They might take up some responsibilities for others on a rotational basis. Most important of all, there should be greater variety in activities provided for the elderly residents. In the placement in public housing provided by the Hong Kong Housing Authority, for example, the elderly clients should have a certain degree of choice in the locations of allocation or the type of housing to which they might be allocated.

Third, the degree of control should be kept at an optimal level, as either too much or too little is undesirable. Diagnostic tests can perhaps be used to find out the personality and desired control of individual aged person before control is provided. So, if this were to be carried out, a degree of tailoring for personal needs might be achieved. This could be an important policy initiative, requiring time, resources and, above all, flexibility on the part of a range of officials or gate-keepers.

AUTONOMY AND SECURITY

A concept related to control theory is autonomy. As reviewed by Parmelee and Lawton (1990), the literature on environment and ageing has placed a great emphasis on autonomy. They defined autonomy as a state in which the person is, or feels, capable of pursuing life goals by the use of his or her own resources. They suggested that older people need to maintain perceived and exerted independence as they move from private residences into special housing environments. For instance, freedom of choice, action, and self-regulation of one's life space should be emphasized in elderly private and residential homes.

However, Parmelee et al (1990) also argued that autonomy for aged people in special environments involves the concept of security. Instead,

a specific goal of many special environments for aged people is to promote security - freedom from risk and danger. In other words, the goal is to enhance both physical safety and peace of mind. Many studies have identified that personal safety and security are major concerns of elderly persons (Brennan et al, 1988; Regnier, 1993). Security was also found to contribute to elderly people's residential satisfaction (Carp and Carp, 1982).

The implication of promoting autonomy and security in the design of environments for the elderly people is to put greater emphasis on physical, social and emotional security for this age group. There should be greater concern about reducing the risk of accidents, promotion of visual orientation, environmental familiarity, and neighbourhood integration. As Lawton (1987) argued, the distinction of design features between "housing" and "institution" are no longer as clear cut as they once were. This is certainly relevant for Hong Kong, where the interface between housing and the local environment is often blurred in high density living, yet also exaggerated by high rise buildings.

ADAPTATION LEVEL THEORY AND PRIVACY

A further theoretical perspective of relevance in environmental psychology is Wohlwill's adaptation level theory. According to this theory, too much environmental stimulation has deleterious effects on behaviour and emotions, and too little stimulation similarly also has undesirable effects. This theory implies that an intermediate level of stimulation would be ideal, which is postulated to optimize behaviour. Wohlwill (1974) refers to this shift in optimal stimulation level as *adaptation*. In a study of elderly people in public housing in USA, Howell (1980) reported that, among three different designs of the location of the communal space - the least penetrable access to communal space, the intermediate penetrability to communal space, and the most penetrable access to communal space - the residents who lived in the intermediate type were more healthy, happy and friendly. In this kind of building, the architectural design permitted more personal control over informal encounters while still allowing incidental awareness of intermediate peripheral activity spaces in transit. This study demonstrates that individuals often prefer an optimal level of stimulation. However, this approach also recognizes individual differences in adaptation level. The level of stimulation and the arousal that the individual has become accustomed to should also be taken into account.

Altman's (1975) concept of privacy is also of great relevance to adaptation level theory. It is also of considerable relevance in planning

environments for elderly people. Altman (1975) defined privacy as selective control of access to the self or to one's group. Individuals prefer their own optimal levels of privacy (that is achieved privacy = desired privacy). Too much privacy may lead to isolation and too little privacy may lead to avoidance behaviour. Again, the need for privacy is related to a number of demographic and cultural variables - gender, personality, and culture. It was reported in a study in USA that women responded to high density living arrangement more favourably than men (Walden et al 1981). Those who are more reserved and those who seek more solitude and anonymity tend to have lower self-esteem (Pedersen, 1982). Although cultures are not found to be particularly different in the amount of privacy people desire, they do vary considerably in how people achieve that privacy.

It has been found that those who know how to regulate privacy are those who may be more successful in areas of life beyond the social realm. For example, in a study of nursing home residents in USA (Firestone et al 1980), those who lived in wards recognized they had less privacy than those who lived in private rooms. They had also adapted to more social contact, so they no longer desired to reduce the amount of time they spent with others. Firestone et al (1980) concluded that the residents' acceptance grew with the length of time they had been institutionalized, again an important finding for the social design of residential and nursing home settings.

Land is scarce in Hong Kong. It is not practical to allocate all elderly people to individual private rooms. In sheltered housing and care and attention homes, most elderly people have to live in wards or multi-occupied rooms. It is difficult to cater for the needs of privacy. Nevertheless, in planning for the interior designs in elderly people's homes, in particular the common rooms, the principles of optimal levels of stimulation and privacy should be taken into consideration. In addition, certain privacy regulation mechanisms may be introduced to the elderly people so as to help them to adapt to more social contacts.

CASE STUDIES OF ELDERLY PEOPLE AND HOUSING IN HONG KONG

Under the supervision of the author, students following an Environmental Psychology elective at Lingnan College conducted six case studies of elderly people living in different types of housing in 1993. Out of the six types of housing, two were run by the Hong Kong Government, two were run by voluntary agencies and two were run by the private sector. A brief

report of the studies is presented in Appendix 5.1. From the six cases, the elderly people who lived in elderly homes run by the Government appeared to feel most comfortable, were more satisfied with their homes, and were in healthier condition. On the other hand, those who lived in private homes were less satisfied and were in poorer health. Whilst there are obviously numerous factors influencing satisfaction and quality of life other than the immediate environment the studies are rather revealing. The deleterious factors included bad physical conditions, crowding situation and lack of privacy. The factors contributing to successful living included autonomy, adaptation, good environment and facilities. To a certain extent, these findings corroborated previous studies on environment and ageing conducted in Western societies.

CONCLUSIONS

From both the research literature and practical experience, there is good evidence to conclude that, in the design of environments for the elderly people, some theories from environmental psychology may have considerable relevance to policy and planning policy. The central themes of research on environment and ageing concern autonomy, control and security. Ideally, elderly people's perceived control should be matched with their desired control. Since there are individual differences among aged people, some screening tests as far as possible might usefully be employed to diagnose individual elderly people's needs, in order to cater for their physical, social and emotional security. In relation to the needs of privacy, some mechanisms for assessing and regulating privacy could be introduced to planning environment (at a micro-scale) in order to help elderly people adapt to the new environments in the elderly homes. This review indicates that environmental psychology has considerable potential in the planning of environments for elderly people. It is to be hoped that the cope for its contribution in this very interdisciplinary sphere of activity will be increasingly realised in the coming years.

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APPENDIX 5.1

Case Studies of Elderly People and Housing in Hong Kong

CASE 1: Government Accommodation

Location: 4th Floor of a building in Wanchai

Organising Body: Hong Kong Government

Rent: $434 per month (including electricity and water expenses)

Crowdedness: not crowded, acceptable

Cleanliness: very good

Privacy: 2 /3 per room, little privacy

Spacing: good

Facilities: quite adequate

Staffing: no staff

Social network: all neighbours are elderly people, quite good

Residents' Feelings: - adaptation problem can be overcome

- environment and facilities are quite good

- life is monotonous

- financial burden is great

Case 2: Voluntary Agency Home

Location: St. Francis Street, Wanchai

Organising Body: Voluntary Agency

Rent: $1,468 per month

Crowdedness: no comment

Cleanliness: no comment

Privacy: 2 /3 /6 /7 per room

Spacing: no comment

Facilities: no comment

Staffing: no nurse

Social network: there is a total of 32 elderly residents; with a centre for elderly nearby

Residents' Feelings: no comment

Case 3: Voluntary Agency

Location: ground floor in public housing estate

Organising Body: Voluntary Agency

Rent: $1,538 per month

Crowdedness: acceptable

Cleanliness: acceptable

Privacy: 4 /5 /7 per room

Spacing: with a large common room

Facilities: with TV, fan

Staffing: one doctor comes twice a week on voluntary basis; enrolled nurse; one counseling social worker

Social network: regular group activities provided by the Home with 83 elderly people

Residents' Feelings: - not a very comfortable place

- in case the elderly people needs help, the assistant helps

- not in very good health condition

Case 4: Private Sector Home

Location: first floor of a building (without lift) in Hung Hom

Organising Body: private

Rent: $2,800 per month (normal)

$3,500 per month (with problem)

Crowdedness: wide, there are 8 rooms

Cleanliness: very good

Privacy: 2 per room

Spacing: rooms are small but with a big dining room

Facilities: fans, air-conditioners

Staffing: one doctor and one nurse (but have no recognised qualification)

Social network: no elderly centre nearby

Residents' Feelings: - quite a comfortable place

        - not enough privacy

        - reasonable fee

        - most elderly residents are in poor health condition

Case 5: Private Care and Attention Home

Location: 4th to 6th floor of a building (with lift)

Organising Body: private

Rent: $3,300 - $3,600 per month (normal)

   $4,000 or above per month (with problem)

Crowdedness: very crowded; with beds in the living room; there are 8 rooms

Cleanliness: very bad, with odor

Privacy: 2 /3 per room

Spacing: the space of the room is acceptable, but very narrow in the corridor and common room

Facilities: air-conditioners, TV, two toilets

Staffing: one doctor, one nurse, and one senior nurse

Social network: no elderly centre nearby

Residents' Feelings: - very bad condition

- the facilities provided are not designed for elderly people

- fees are acceptable

Case 6: Public Sector Hostel for the Elderly

Location: 2nd floor of a building in a public housing estate

Organising Body: Hong Kong Government

Rent: $900 per month (included meal)

$309 per month (excluded meal)

Crowdedness: very good, with a long and wide corridor with 28 rooms

Cleanliness: very good

Privacy: 4 /5 per room

Spacing: with a very large common room

Facilities: fans

Staffing: two enrolled nurses, and one supervisor

Social network: with regular function for the elderly people; with an elderly centre nearby

Residents' Feelings: - very comfortable

- high autonomy for the elderly people

- good healthy condition

PLANNING FOR AGEING POPULATIONS

6

The Changing Spatial Distribution of Elderly Population and Its Planning Implications

Anthony Gar-On YEH

INTRODUCTION

Many studies have shown that because of population migration and demographic transition, a distinctive spatial distribution emerges of the ageing and elderly population (Golant, 1990; Wiseman, 1978). The concentration of the elderly population in certain areas and the interaction of elderly persons with the environment require a synthetic and holistic approach to the study of the problems of ageing and the aged (Golant, 1979). Different approaches may be needed in dealing with the aggregate needs of the elderly populations in different areas.

Lo's (1984) study of the spatial distribution of the elderly population in Hong Kong in 1981 showed that it was not too different from that of the overall population of the territory. Elderly people (aged 60 and above) tended to be concentrated in the urban areas and new towns where people in other age groups were also concentrated. However, since 1981, there have been many changes in Hong Kong's urban development, especially following the completion of new towns that were developed during the 1970s and the concomitant decentralization of population (Yeh, 1993). There is now a marked change in the distribution of the population in Hong Kong. In 1981, 85.9% of the population in the territory was in the Metro Area[1] and this declined to 65.1% in 1996 as population decentralized to the new towns in the New Territories. This paper is a preliminary analysis of the changing distribution of the elderly population in 1981 and 1996 to

investigate whether it has followed that of the general population and to discuss the planning implications of the current distribution of elderly people.

CHANGES IN THE SPATIAL DISTRIBUTION OF THE ELDERLY POPULATION

The age definition of elderly population used in this study is 65 and above. 65 is chosen because it is the lower age limit for the receipt of the Old Age Allowance of the Social Welfare Department. This should be a better indicator for ageing in Hong Kong than the often-used 60 years age lower limit because many government policies are based this definition. Data from the 1996 By-Census are used for the study (Census and Statistics Department, 1997a and 1997b).

Like many other places in the Asia-Pacific region, Hong Kong is ageing quite rapidly. The percentage of elderly population has increased from 6.6% in 1981 to 10.2% in 1996. The 94.5% growth rate (6.3% average annual growth rate) of the elderly population is much higher than the 25.8% growth rate (1.7% average annual growth rate) of the total population. In absolute numbers, the elderly population in Hong Kong has increased from 325,053 in 1981 to 632,340 in 1996, an overall increase of 307,287 persons.

As compared with 1981, there was a marked concentration of the elderly population in the old urban areas in the Metro Area in 1996 (Table 6.1). In 1981, there was not much difference between the distribution of elderly population and that of the total population in Hong Kong. But, in 1996, the percentage of elderly population in the Metro Area was 1.3 percentage points higher than that of the total population, whereas the New Territories was 2.5 percentage points lower. Location quotients[2] (LQ) for the percentage of elderly population in a district were calculated to show the spatial variation of elderly population among the District Board districts in 1996. There is a higher concentration of elderly population in the Metro Area districts than in other districts of Hong Kong. The old districts of Sham Shui Po and Wong Tai Sin had the highest percentage of elderly population, with over 4 percentage points higher than Hong Kong's norm of 10.2% (Table 6.1 and Figure 6.1). They were followed by Wan Chai, Kowloon City, Kwun Tong and Yau Tsim Mong which were 1-4 percentage points higher than the Hong Kong norm. The environments in many areas in these districts are poor and not friendly to the elderly people, especially the low income group, living there.

Table 6.1   Changes in the Distribution of Hong Kong's Elderly Population by District Boards, 1981-1996

District Board	1981			1996			1981-1996	
	Total Population	Elderly Population	% Elderly Population	Total Population	Elderly Population	% Elderly Population	Absolute Increase in Elderly Population	Change in % Elderly Population
Central and Western	276,734	22,300	8.1	259,224	27,571	10.6	5,271	2.6
Wan Chai	228,414	19,697	8.6	171,656	20,387	11.9	690	3.3
Eastern	461,456	30,761	6.7	594,087	63,152	10.6	32,391	4.0
Southern	217,017	12,353	5.7	287,670	30,283	10.5	17,930	4.8
Sham Shui Po	455,465	34,568	7.6	365,927	53,213	14.5	18,645	7.0
Kowloon City	482,088	31,280	6.5	378,205	45,470	12.0	14,190	5.5
Wong Tai Sin	489,003	32,479	6.6	396,220	57,339	14.5	24,860	7.8
Kwun Tong	610,262	33,647	5.5	590,180	67,902	11.5	34,255	6.0
Yau Tsim Mong	412,203	31,552	7.7	260,573	32,330	12.4	778	4.8
Kwai Tsing	413,714	20,699	5.0	470,726	46,451	9.9	25,752	4.9
Tsuen Wan	194,078	8,944	4.6	270,801	21,644	8.0	12,700	3.4
Tuen Mun	119,128	5,660	4.8	463,703	26,961	5.8	21,301	1.1
Yuen Long	186,761	12,329	6.6	342,922	33,092	9.7	20,763	3.0
North	113,874	9,182	8.1	231,907	19,020	8.2	9,838	0.1
Tai Po	73,117	5,363	7.3	284,640	21,030	7.4	15,667	0.1
Sha Tin	115,888	6,319	5.5	582,993	46,207	7.9	39,888	2.5
Sai Kung	41,987	3,304	7.9	197,876	13,862	7.0	10,558	-0.9
Islands	45,624	4,616	10.1	63,057	6,426	10.2	1,810	0.1
Total	**4,936,813**	**325,053**	**6.6**	**6,212,367**	**632,340**	**10.2**	**307,287**	**3.6**
Metro Area	4,240,434	278,280	6.6	4,045,269	465,742	11.5	187,462	5.0
New Territories (NT)	696,379	46,773	6.7	2,167,098	166,598	7.7	119,825	1.0
Metro Area %	85.9%	85.6%	-	65.1%	73.7%	-	-	-

Source: Census and Statistics Department

Figure 6.1   Concentration of Elderly Population by District Boards in Hong Kong, 1996
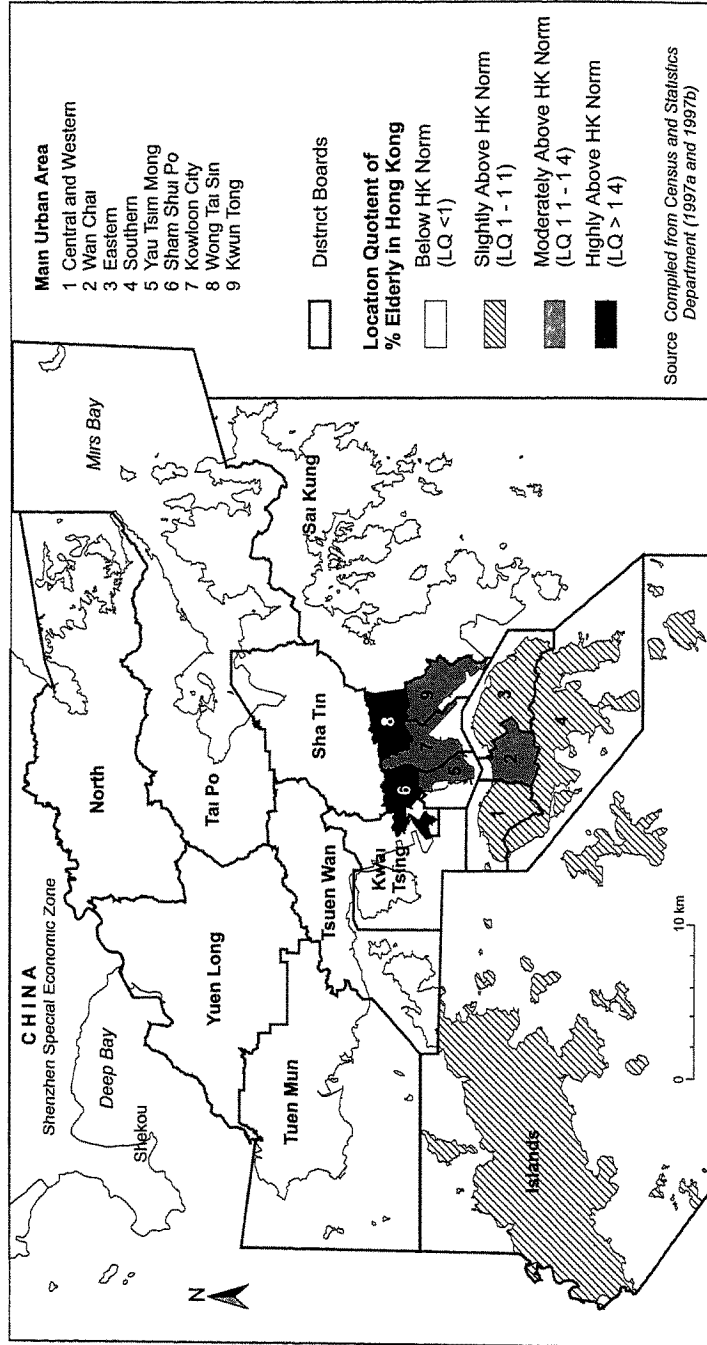
Figure 6.2   Concentration of Elderly Population by TPUs in the Metro Area in Hong Kong, 1996

District Boards

Location Quotient of % Elderly in Hong Kong

Below HK Norm (LQ <1)

Slightly Above HK Norm (LQ 1 - 1.1)

Moderately Above HK Norm (LQ 1.1 - 1.4)

Highly Above HK Norm (LQ > 1.4)

Source: Compiled from Census and Statistics Department (1997a and 1997b)
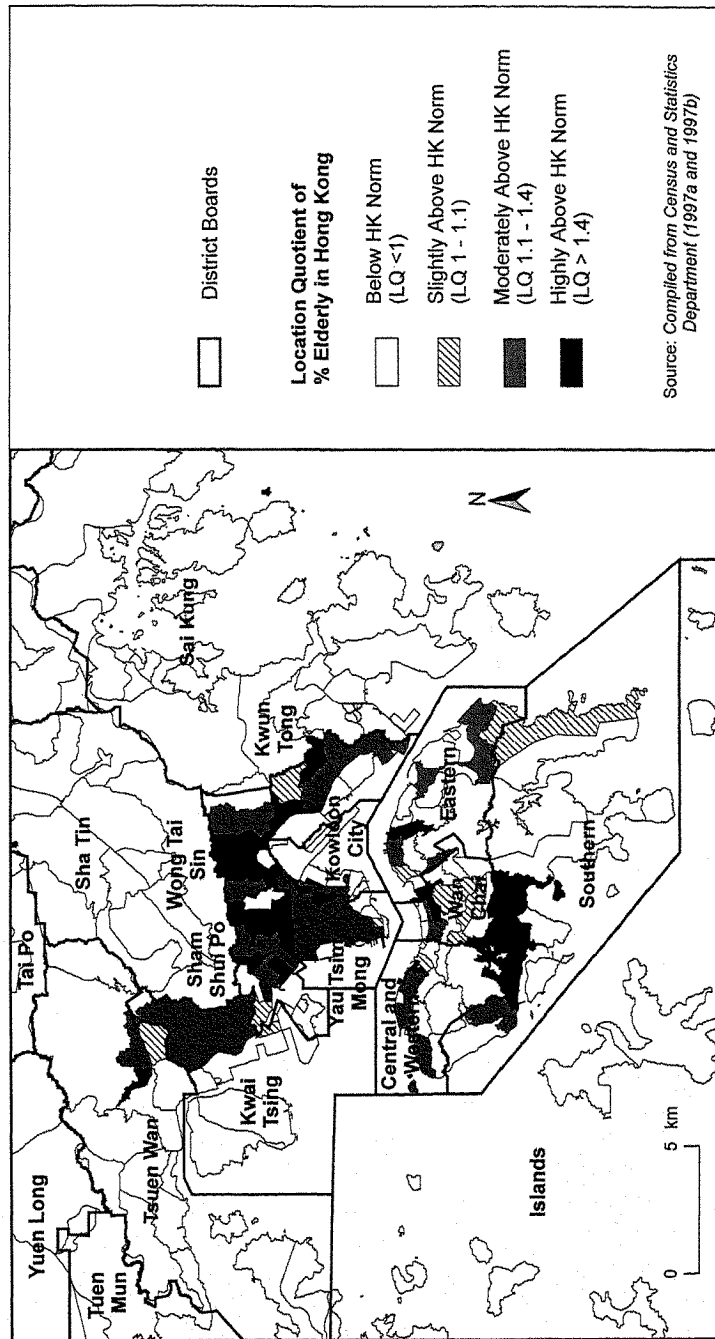
Figure 6.3   Low Income and Poor Housing TPUs in the Metro Area of Hong Kong, 1996
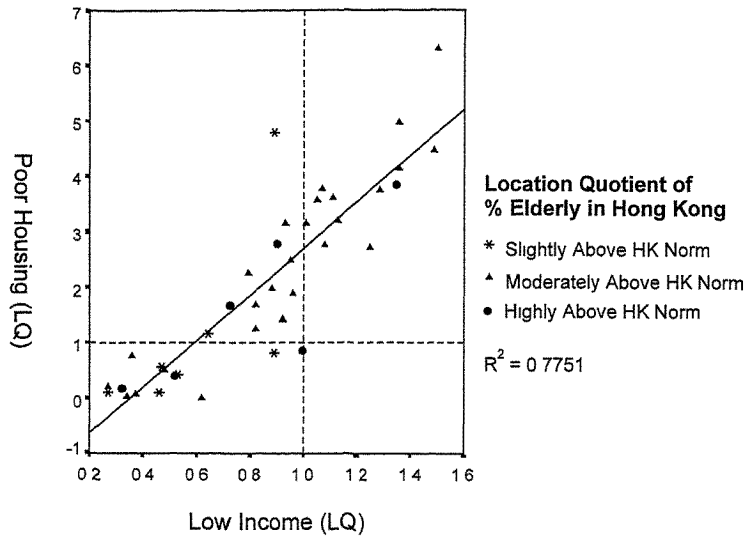
DISTRIBUTION OF THE ELDERLY POPULATION IN THE OLD URBAN AREAS

The distribution of elderly population in the Metro Area where a high concentration of elderly population is found is further analysed at the TPU (Tertiary Planning Unit) level. Figure 6.2 shows the distribution of the elderly population is higher than the Hong Kong norm in TPUs with a population of more than 100 persons[3]. Some elderly residents are located in public housing areas where the housing conditions and living environment are better than those in many private housing areas. In the last twenty years, the housing environment in the public housing areas has been much better than in the low income housing in the private housing areas. The worst situation for an elderly person to be in is when he or she is old, poor, and lives in poor housing. In TPUs which mainly consist of private housing, there is a correlation between income and housing conditions. In the scattergram of percentage of low income households and percentage of poor housing[4], it can be seen that there is a close relationship between low income households and poor housing in the upper right quadrant, areas where they are above Hong Kong norms (Figure 6.3). The distribution of elderly population in low income and poor housing TPUs is shown in Figure

Figure 6.4   Distribution of Elderly Population in Low Income and Poor Housing TPUs in the Metro Area of Hong Kong, 1996
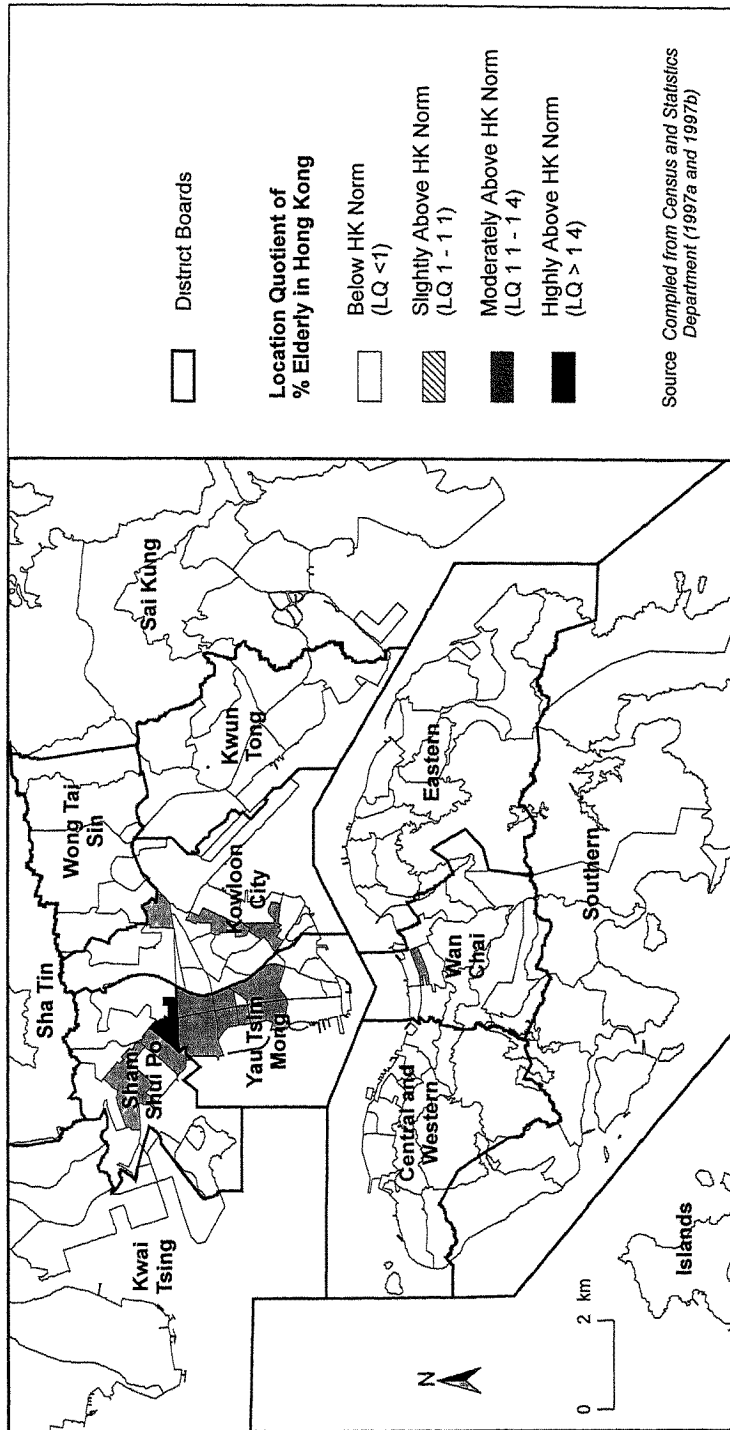
6.4. Most are located in Sham Shui Po, Yau Tsim Mong and Kowloon City. These TPUs therefore should be areas of our major concern because they are areas with high concentrations of poor elderly people living in poor housing conditions. In 1996, 62,063 elderly people were living in 14 TPUs with a high concentration of low income families and poor housing.

PLANNING IMPLICATIONS

Physical changes associated with ageing have great implications for the planning of a better environment for the elderly (Howe, Chapman, and Baggett, 1994). The environmental requirements of the elderly people can be somewhat different from those of other groups of people. For example, they have more time, generally need more health care, and some are handicapped (see Chapter 2). They require a physical and social environment from the room, house, and building levels to the neighbourhood level that is conducive to their needs. A multi-disciplinary integrated approach is needed in order to provide a better environment for them.

The study has identified areas in the old urban areas in Hong Kong where the environment is most harsh and unfriendly to the elderly residents. Some of the poor elderly people are living in old overcrowded tenement housing with a very poor environment and some are even still in "caged-housing". In a study by the Society for Community Organization (1995) in the Central Nam Cheong area in Shamshuipo District, which is located in one of the low income and poor housing TPUs, it was found that over 20% of the residents were elderly people aged above 60. They were mainly singletons (85%), with an average duration of residence in the district of 26.7 years. Over 80% had a monthly income of less than HK$4,000. Most lived in overcrowded conditions, such as single rooms or cubicles of less than 5.2 sq. m. (50 sq. ft.). Many suffered from financial problems, long waiting times for medical services, and lack of social services. A very similar picture has also been found in a study of elderly people living in housing scheduled for redevelopment in the Wan Chai District (Wan Chai District Board, 1999). Because of the age structure and outmigration of younger people, the number and percentage of elderly population in these low income and poor housing areas will increase in the future. There is a need to put in more resources to alleviate them from the poor living environment, such as the provision of more public facilities and social services.

Many of the elderly people in these poor neighbourhoods may not be able to benefit from the recent developments in the planning and design for

the elderly in Hong Kong. Most of these developments are for public housing and new private housing which are financially inaccessible to many of them. These areas are also volatile areas with active redevelopment both by the private sector and the Land Development Corporation (LDC). Six out of fourteen of these TPUs are affected by the Land Development Corporation and Comprehensive Redevelopment Area's (CDA) projects. Urban redevelopment will uproot many of the elderly people who are living there, forcing them to be relocated to a new neighbourhood in the new towns and breaking their social networks which are much needed for their social support. Many of the elderly people have resided over 25 years or more in these districts (Society for Community Organization, 1995; Wan Chai District Board, 1999). Measures are needed to improve the environment for the disadvantaged elderly people who are living in these old urban areas. The present paper only brings out the broad picture of the problems of the spatial concentration of the elderly population in the old urban areas in Hong Kong. Further research is needed to study the socio-economic characteristics, needs, and the social behaviour of elderly people who are living in these areas in order to develop measures that can improve their physical and social environments.

NOTES

1. The Metro Area in Hong Kong is different from "metropolitan area" commonly used in other places in the world which refers to the city and its surrounding commuting areas. In Hong Kong, it refers to the city proper (main urban areas) that consists of Hong Kong Island, Kowloon, and New Kowloon plus the Kwai Chung - Tuen Wan new town.

2. The Location Quotient (LQ) of a district is calculated by dividing the percentage of elderly population in a district by the percentage of the elderly population of the total population in Hong Kong. An LQ of greater than 1 indicates that the district has a higher percentage of elderly population than the overall percentage of elderly population in Hong Kong. An LQ of 1 or less than 1 indicates that it has the same or lower percentage of elderly population as the overall percentage of elderly population in Hong Kong. For details of location quotient, please see Isard et al. (1960) and Klosterman (1990). For its application in the study of elderly population distribution, please see Phillips, Vincent and Blacksell (1987).

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3. In the study, only TPUs with a population of over 100 are analyzed to avoid the problems of distorting the proportions of elderly population because of a small population base.

4. The percentage of household with household income of less than HK$15,000 is used to indicate the percentage of poor in a TPU. Percentage of household with multi-tenancy, which is the sum of households that are main tenants, sub-tenants, and co-tenants over the total number of households, is used as a proxy for percentage of poor housing in a TPU. Multi-tenancy generally occurs in private buildings with poor housing conditions, such as over crowdedness.

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7

Planning Standards for Facilities for the Elderly

Lisa Lai-Sum CHENG

INTRODUCTION

As most people are aware, Hong Kong's population is ageing rapidly. Due to the changing demographic structure, the number of people aged 65 and above is expected to increase at a potentially alarming rate in the coming years from about 631,000 in 1996 to about 1,092,000 in 2016, an increase of 73 percent. It is therefore important that an adequate number and suitable types of facilities are provided to address the needs of the elderly. This is achieved in Hong Kong via reference to particular planning norms. This paper now takes the opportunity to outline briefly the current planning standards for the provision of facilities for the elderly and the recent changes that have been made to these standards. The process under which planning standards have been drawn up to accommodate/assist initiatives of relevant bureaux/departments will be explained. It is hoped that by having a better understanding of the process, members in the field can contribute more readily towards ensuring that the standards are kept updated and are appropriate for guiding the provision of facilities for the elderly.

HONG KONG PLANNING STANDARDS AND GUIDELINES

The Hong Kong Planning Standards and Guidelines (HKPSG) is basically a manual of planning criteria, standards and guidelines, for use in town planning and related fields in the preparation of town plans and in considering the general allocation of land resources. As such, it only covers physical matters that are more of a macro-scale such as the land

requirements, external dimensions and locational requirements of major types of land use and facilities. There are of course other standards related to building safety and health regulations, as well as detailed design requirements for each type of facility. However, they are outside the jurisdiction of the Planning Department and beyond the scope of the HKPSG. This chapter presents a discussion of those standards that are the responsibility of the Planning Department.

It should be noted that, for a specific type of facility, the provision standards have been drawn up by the relevant policy bureaux and departments directly responsible. This means that the Health and Welfare Bureau and the Social Welfare Department are primarily responsible for determining the provision standards for facilities for elderly people. They have to operate under parameters of prevailing policy directives, allocated budget, available resources and existing rules and regulations. The Architectural Services Department, on the other hand, assists in undertaking architectural feasibility studies to work out the net land and/or operational floor area requirements of a given facility, depending on whether the facility requires a free-standing site or whether it can be co-located with other facilities in multi-storey buildings.

PLANNING STANDARDS FOR FACILITIES FOR THE ELDERLY

The current HKPSG include standards for two main types of facilities for elderly people, namely community support facilities and residential services for the elderly (see also chapter 8). An extract of such standards is provided in Appendix 7.1. Highlights are as follows:

Community Support Facilities

a. - *Social Centres for the Elderly*

One centre per 2,000 elderly population aged 65 and above
(A net operational floor area (NOFA) of 140m²)

b. - *Day Care Centres for the Elderly*

One centre per 17,000 elderly population aged 65 and above
(A NOFA of 200m²)

c. - *Multi-service Centres for the Elderly*

One centre per 17,000 elderly population aged 65 and above
(A NOFA of 320m²)

Residential Services

a. - *Homes for the Aged*

15 places per 1,000 elderly population aged 65 and above
(A NOFA of 1,030m² for 100 persons)

b. - *Care-and-Attention Homes*

17 places per 1,000 elderly population aged 65 and above
(A home with 250 persons is preferred)
(A NOFA of 3,100m²)

c. - *Combined Homes*

The ideal mix is 100 "Home for the Aged" places plus 150 Care and
Attention places.
(A NOFA of 2,870m²)

In addition, the HKPSG has included general descriptions of each
type of facility, as well as their locational and parking requirements to
assist planners in reserving suitable sites for such uses. There are also
provision standards with regard to facilities for the general public which
also serve elderly people. These include community and social welfare
facilities, such as community halls, medical and health facilities, open
space and recreational facilities.

RECENT CHANGES TO THE PLANNING STANDARDS THAT DIRECTLY OR INDIRECTLY AFFECT ELDERLY PEOPLE IN HONG KONG

Certain recent developments have been included in the HKPSG and those
of direct relevance to planning for elderly people's provision are now
noted. For example, the Social Welfare Departments had recently initiated
some changes to the floor area requirements for day care centres for the
elderly and care-and-attention homes, among other facilities. This is a
result of a comprehensive review of the schedule of accommodation, design
and floor plan of these facilities to optimise their design and usage.

Standards for Community Centres have also been amended and such facilities no longer require free-standing sites. Some of the sites previously reserved for community centres are now proposed for the joint development of community halls, social welfare centres and/or housing flats for elderly people (such as at Lam Tin South, Kwai Shing East Estate and On Yam Estate).

Open space standards have been comprehensively revised based on the findings of a recent study commissioned by the Planning Department on leisure habits and recreation preferences. Specific amendments affecting elderly people include encouraging the provision of more passive open space to be located near residential areas within walking distance of where elderly persons live, and the incorporation of guidelines on the special needs for disabled and elderly people.

THE PROCESS OF FORMULATION AND REVIEW OF THE PLANNING STANDARDS AND GUIDELINES

The formulation and review of planning standards may be initiated by relevant policy bureaux and departments or by the Planning Department based on the findings of endorsed studies. Proposed new standards or revisions to existing standards are handled by the Planning Standard Sub-Committee(PSSC), chaired by a deputy director of the Planning Department, and is served by the Standards and Studies section of the Department. The Terms of Reference and membership of the PSSC are shown in Appendix 7.2. The processes involved in the formulation and review of the Standards and Guidelines are as summarised in Appendix 7.3.

CONCLUSION

Persons with questions on the existing planning standards are invited to contact the Standards and Studies section of the Planning Department. However, if they wish to initiate changes to these standards, they should channel their views through the relevant departments and bureaux.

APPENDIX 7.1

Extracts from Section 10.2 in Chapter 3 of the Hong Kong Planning Standards and Guidelines

Community Support Facilities for the Elderly

10.2.12 Community support facilities for the elderly are provided to meet the varying needs of elderly people aged 60 or above who are still living in the community but require different types of services during the day time. There are mainly three types of such facilities : namely Social Centres for the Elderly, Day Care Centres for the Elderly and Multi-service Centres for the Elderly.

Social Centres for the Elderly

10.2.13 Social Centres for the Elderly are provided to meet the social and recreational needs of elderly people aged 60 or above in the community. They are open during the day time and activities organized include social groups, interest groups and classes such as handicraft, cookery and fitness and health programmes. Persons aged 65 and above, being the majority users of the service, will be taken as the target population for planning purpose. The standard of provision is one centre for every 2,000 elderly population aged 65 and above. This standard can, however, be applied flexibly, particularly in areas with scattered population. Each centre requires a net operational floor area of 140m².

Day Care Centres for the Elderly

10.2.14 Day Care Centres for the Elderly aim to provide care and attention to elderly people aged 60 or above in declining health but are still fairly mobile and whose family members cannot take care of them during the day time. Services provided include meals, personal care and limited nursing care. Persons aged 65 and above being the majority users of the service, will be taken as the target population for planning purpose. The standard of provision is one centre for every 17,000 elderly population aged 65 and above. Each centre

requires a net operational floor area of 200m². A parking space for two 16-seater vans should be reserved for its exclusive use. Loading and unloading facility for wheelchair users located in close proximity to the centre is also required.

Multi-service Centres for the Elderly

10 2.15   Multi-service Centres for the Elderly provide a wide range of services to meet the various needs of elderly people aged 60 or above. Services provided include social and recreational activities, laundry, canteen, counselling, and home help, etc. Persons aged 65 and above, being the majority users of the service, will be taken as the target population for planning purpose. The standard of provision is one centre for every 17,000 elderly population aged 65 and above. Each centre requires a net operational floor area of 320m². A parking space for a 16-seater van should be reserved for its exclusive use. Loading and unloading facility for wheelchair users located in close proximity to the centre is also required.

Locational Factors

10.2.16   All three types of day care services facilities for the elderly should be located on ground or lower floors of a building in order to be easily accessible to the clients. Should they be located above the ground floor level, they should not be more than 24 metres above ground and should be accessible by lift. Proximity to open space or playground is also preferred. For Multi-service Centres and Day Care Centres for the Elderly, as they are intended to serve the entire district, they should be centrally located.

Residential Services for the Elderly

10.2.17   Residential services are provided for those elderly who, for health or other reasons, are unable to look after themselves and who have no relatives or friends to assist when required. These include Homes for the Aged and Care-and-Attention Homes.

Homes for the Aged

10.2.18   Homes for the Aged aim to provide service to elderly people aged 60 or above who have housing and social needs and are unable to live independently. The services provided include centralised meal service, heavy laundry and daily cleaning, escort for medical consultation, limited assistance in personal care where necessary, general supervision of health care, and organised social and recreational programmes.

10.2.19   Such homes can be accommodated either in purpose-built buildings or in public housing estates. Persons aged 65 and above, being the majority users of the service, will be taken as the target population for planning purpose. The standard of provision is 15 places per 1,000 elderly population aged 65 and above. For a home with a capacity of 100, a net operational floor area of 1,030m² is required.

Care-and-Attention Homes

10.2.20   Care-and-Attention Homes provide residential personal care and limited nursing care for elderly people aged 60 or above who, although not suffering from any acute medical problem, are incapable of living independently and require assistance in daily living activities.

10.2.21   Such homes can be accommodated either in purpose-built buildings or in public housing estates. Persons aged 65 and above, being the majority users of the service, will be taken as the target population for planning purpose. The standard of provision is 17 places per 1,000 elderly population aged 65 and above. From cost-effectiveness and management points of view, a home with a capacity of 250 persons is preferred. A net operational floor area of 3,100m² is required. A parking space for a 16-seater van should be reserved for its exclusive use. Loading and unloading facility for wheelchair users located in close proximity to the home is also required.

Combined Homes

10.2.22   Currently, it is preferred that 'Homes for the Aged' places and 'Care-and-Attention' places co-exist in the same premises. Such a 'Combined Home' setting facilitates the internal transfer of residents as their conditions deteriorate/ improve requiring a corresponding change in the level of care provided. Since planning of the respective type of places is based on the same standards of provision as for independent homes, there is no need to set specific standard of provision for Combined Homes. For such a home, a capacity of about 250 places (100 'Home for the Aged' places plus 150 'Care-and-Attention' places) is the ideal mix. A net operational floor area of 2,870m² is required for the complex.

Locational Factors

10.2.23   The Homes for the Aged, Care-and-Attention Homes and Combined Homes should be located on the ground floor or lower floors accessible by lift and should not be at a height of more than 24 metres above ground, measuring vertically from the ground of the building to the floor of the premises at which the home is to be situated.

APPENDIX 7.2

The Terms of Reference and Membership of Planning Standards Sub-Committee (PSSC)

1. Terms of Reference

(a) To coordinate, in close consultation with departments concerned, the formulation of planning standards and guidelines so as to provide necessary information and guidance to departments and other agencies for the preparation and revision of their own development plans and programmes;

(b) To monitor, interpret and review the effectiveness of such standards and guidelines, and to initiate surveys and other investigations to determine what revisions are required. In this context, to take particular account of resources likely to be available, approved practices and policies, and information relating to the formulation and review of a long-term territorial development strategy; and

(c) to recommend to the Committee on Planning and Land Development (CPLD) proposed new standards and guidelines, and amendments to approved standards and guidelines.

2. Membership

Chairman: Deputy Director of Planning/Territorial
Members: Representative of the Secretary for Planning, Environment and Lands
          Representative of the Secretary for Broadcasting, Culture and Sports
          Representative of the Secretary for Economic Services
          Representative of the Secretary for Home Affairs
          Representative of the Secretary for Treasury
          Representative of the Commissioner for Transport
          Representative of the Director of Buildings
          Representative of the Director of Lands
          Representative of the Director of Housing
          Representative of the Director of Territory Development
          Representative of the Director of Environmental Protection
          Representative of the other Bureaux and Department Heads as required
Secretary: Representative of the Planning Department

APPENDIX 7.3

Formulation and Review of Planning Standards and Guidelines

Formulation of new policy or revision to existing policy that has land use implication.

Bureaux/departments submit requests for formulation or review of standards and guidelines to PSSC or PSSC initiates as and when required. PSSC sets up inter-departmental ad hoc working group(s).

The Secretary of PSSC, in association with relevant bureaux/departments, circulates proposed terms of reference and membership of working group.

Draft reports vetted by bureaux/departments concerned; reference to any relevant specialist ommittees

Working groups convene and produce argument papers and draft reports; policy status and outline financial implications of all proposals to be included where partical & approprite.

Working groups submit draft reports together with the proposed planning standards and guidelines to PSSC PSSC considers general policy implications and any outstanding points of issue.

PSSC submits proposed planning standards and guidelines to CPLD for approval.

The Secretary of PSSC circulates new or revised planning standards and guidelines and incorporates new sections or chapters into HKPSG..

Monitoring & review by PSSC.

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Planning of Social Welfare Facilities for Elderly People

Patricia CHU

SOCIO-CULTURAL CHANGES

With healthier lifestyles and a more effective control of environmental health risks, more people in Hong Kong are living longer. The percentage of persons aged 60 and above has increased from 13 percent of the total population in 1991 to 14.3 percent in 1996. It will reach 14.8 percent by 2006 and 19.7 percent by 2016, with a significant increase in the number of persons aged 75 and over. In absolute figures, the total number of elderly above the age of 60 is about 890,000. Life expectancy was 76 years among males and 82 years among females in 1996.

As people grow older, they have special needs and they rely more heavily on the support from their families. However, family structure in Hong Kong is also changing. In 1981, 54.4 percent of total households in Hong Kong were nuclear families. That percentage increased to 61.6 percent in 1991 and 63.6 percent in 1996. Moreover, according to the 1996 Population By-census, about 72,114 elderly people were living alone. This constitutes 12.1 percent of the elderly population. There is also a large number of domestic households (470,298) with one or more elderly persons living together. Last but not the least, traditional values of respect and care for the elderly are felt to be weakening. All these social factors have a great impact and many implications for the planning of social service facilities for elderly people.

LEVELS OF PLANNING

Taking into account the varying social, psychological and welfare needs of elderly people, the planning of services for this group is a very complicated process. Planning can be differentiated mainly into three levels. First, at the macro level, it involves policy development and programme planning. To use Alfred Kahn's words, it is a question of *"policy choice and programming in the light of facts, projections and application of values"*. In the process of policy formulation and realization through choices and rationalisation, there are elements of research, value analysis, policy formation, programming, measurement and feedback.

In order to develop the services within the policy framework, and the programme plan of elderly services, the second level of planning comes into play. In the process of planning of services, steps include demand assessment, decisions on distribution and location of services to be followed by acquisition of land and premises and bidding of funds. Thirdly, at the micro level, service projects are planned and implemented on a case-by-case basis, that is, from the inception of the idea to the actual delivery of the service. Steps involve allocation of funds, commissioning of projects, design, tendering, construction/fitting out, manpower provision and commencement of service.

The whole process is a complicated one and each step is essential and interwoven with the others. It is also clear that the planning process involves different groups of people, such as policy makers, researchers, town and housing planners, architects and service providers and every one contributes towards meeting the needs of the elderly clients.

GUIDING PRINCIPLES FOR PLANNING

In the development of services for elderly people, the following basic principles and concepts have been adopted in the White Paper on Social Welfare into the 1990s and Beyond (March 1991) and the Report of the Working Group on Care for the Elderly (1994):

- Dignity of the elderly - *the dignity of older persons in society must be recognized and respected, and this can be enhanced through promoting a sense of security, a sense of belonging and a sense of worthiness.*

- Care in the community and ageing in place - *elderly persons and their families should be supported through family care and community*

services to enable the elderly to grow old in their home environment for as long as the elderly person desires with minimal disruption.

- Continuum of care and integration of services - *an integrated approach in providing services to meet the different levels of care needs of the elderly so as to enable them to stay in familiar surroundings and with minimal duplication.*

AN INTEGRATED AND COORDINATED APPROACH

Experience shows that, in order to achieve an integrated policy for the elderly, and to plan for the provision of services, the welfare sector cannot work on its own, as elderly clients are individuals who have multifaceted needs. To address the various economic, psychological and social needs of elderly people in accordance with the basic principles and concepts, social welfare policy-makers and social workers, both in the Government and NGO sectors, have to work hand-in-hand with other professionals. These include health care personnel, geriatricians, gerontologists, town-planners, housing experts and architects amongst others. It is also becoming more and more apparent that the involvement of the whole community - the private or public sector, elderly people, the family, the neighbourhood or even the community-at-large - is essential, with the view of taking care of the different needs of the elderly.

THE ELDERLY COMMISSION

The establishment of the Elderly Commission (EC) in July 1997 is a positive step taken by the Hong Kong Government to adopt a more integrated approach to the planning and provision of services for the elderly. The membership of the EC indicates the Government's recognition of the need for the involvement of different professionals and sectors in addressing the overall needs of elderly people. The terms of reference of the EC are:

- to advise the Government on formulation of a comprehensive policy for the elderly,

- to co-ordinate the planning and development of various programmes and services for the elderly,

- to recommend priorities for implementation,

- to monitor the implementation of policies and programmes,

- to make recommendations to the Government.

These terms of reference provide a framework within which the EC deals with the first two levels of planning.

STRATEGIC POLICY OBJECTIVES (SPOs)

Strategic policy objectives link with the Chief Executive's commitment towards promoting the well-being of Hong Kong's elderly population. In his first Policy Address delivered in October 1997, the Chief Executive selected "Care for the Elderly" as one of the four Strategic Policy Objectives (SPOs). In this SPO, the Government sets out its commitments towards caring for the elderly and describes the initiatives being undertaken and to be taken and the resulting benefits. The Secretary for Health and Welfare is tasked by the Chief Executive to liaise with the various concerned parties, both within and outside the Government to take this SPO forward.

Under the themes of promoting a sense of security, belonging, health and worthiness, there are specific targets:

- To provide retirement protection and other financial help where there is a real need;

- To encourage family support;

- To increase the supply of housing for the elderly;

- To increase the supply of subvented and self-financing residential care places;

- To improve the quality of residential care services and to enable residential care homes to better achieve the objective of a continuum of care;

- To provide dedicated medical and health services;

- To provide necessary social services;

- To encourage the elderly to lead an active life.

Initiatives and benefits are clearly spelt out in the booklet covering the SPO of "Care for the Elderly". This is the first time that the highest level within the Government has set out so clearly and specifically the targets, initiatives and benefits and it provides a blue-print for the

development of services to meet the financial, housing, medical, social and psychological needs of the elderly.

PILOT PROJECT ON THE VERTICAL INTEGRATION OF SERVICES

An integrated approach will provide elderly people with more convenient access to available services and, wherever possible, it should reduce fragmentation of service provision. A very good example is a recent attempt to develop an integrated model for the provision of housing, welfare services and health care for the elderly under one roof. This is a project at Lam Tin, a joint scheme of small household development for single elderly people. It incorporates elderly facilities including a residential home, a social centre for the elderly, a career support and resource centre, a base for home help service and an elderly health centre. As far as possible, the services will be provided by one organisation so as to facilitate flexibility and maximum mobilization of resources. With this all-embracing care delivery model, elderly in the locality will benefit from a one-stop service enabled by the co-location of elderly facilities. This, hopefully, will address the various social, health and housing needs of elderly people, enhance accessibility, and enables the elderly people to stay in the community and receive services in a familiar locality. This pilot project is an example to illustrate that, with coordinated efforts among various professionals and organisations working closely together, services can be better integrated to serve the varying needs of the elderly. The proposal has received the full support from the senior Administration and the Kwun Tong District Board. Detailed planning is in progress, with the involvement of the Housing Department, Home Affairs Department, Social Welfare Department and the Department of Health.

PROVISION OF RESIDENTIAL CARE SERVICES

Residential care is provided for elderly people who, for health, social or other reasons, can no longer live with their families or on their own. As at the end of March 1998, there were 967 self-care places, 8,160 home for the aged places and 10,081 care-and-attention places, that is, a total of 19,208 subvented and self-financing places. All residential care homes for the elderly are regulated by a licensing system under the Residential Care Homes (Elderly Persons) Ordinance, which has been in full operation since June 1996.

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A GATE-KEEPING MECHANISM FOR
RESIDENTIAL SERVICES

Another example to illustrate the need for an integrated approach is the development of a gate-keeping mechanism for residential care for elderly people. At present, elderly cases are referred to the central waiting list. This can be either by a family caseworker from a family service centre or, more often, by a medical social worker based in the hospital. They make reference to the existing admission criteria for residential care but without going through a proper assessment. Very often, cases are put on the central waiting "just in case" residential care is needed. The central waiting list for care and attention homes is getting longer and longer (and currently stands at 18,000). The average waiting time is about 33 months, or 26 months even if the applicant does not insist on a locational preferences and type of home. This gives a distorted picture of the real need for residential care and is considered unacceptable.

Therefore, a coordinated gate-keeping mechanism is essential, with input from medical, nursing, social work and allied health personnel. This involves carefully working out assessment criteria, drawing up procedures for referral, assessment, formation of care plans and review. It will mean that only those who have gone through an assessment process and meet the admission criteria will be put on the waiting list and admitted into residential services. In working out the gate-keeping mechanism, input from the various concerned government departments, the Hospital Authority and non-governmental organisations is needed. With the gate-keeping system, it is anticipated that the waiting list will be reduced and only those with genuine need for residential care can enter residential care homes for the elderly. This will, in the long run, provide a more realistic reference for the assessment of demand for service to facilitate better planning.

COMMUNITY SUPPORT SERVICES

Community support services play an important role in supporting elderly people to live in the community as long as possible. These services include multi-service centres, social centres, day care centres and home help services (see chapter 7 for Hong Kong planning standards de+tails). At the end of March 1998, there were 28 multi-service centres which provide a full range of community support services, including social activities, home help, counselling, laundry and canteen facilities and community education on a district basis. There were also 261 social centres for the elderly that

provide organized activities and mutual help services to meet the social needs of elderly people. 28 day care centres provide a range of services to the elderly who are still mobile but in declining health and lacking family members to look after them on a full-time basis. Home help services provide meals, personal care, escort services, laundry and home management services to those in need of such help. They provide invaluable support to families and individuals. At the end of March 1998, there were 126 home help teams in operation. There are also two Volunteer Workers Programmes and 8 Older Volunteers Programme to provide significant support to the elderly. In addition, volunteers pay visits to vulnerable elderly people who are known to the Social Networking for the Elderly Project, to show community care and concern. At the end of February 1998, over 6,500 volunteers had been recruited under this project.

Other community support services for elderly people include an outdoor and recreational bus service, a holiday centre and an outreaching service for the elderly. To provide elderly persons aged 65 or above with a generally recognized proof of age to facilitate access to discounts, concessionary benefits and priority services offered by public operators and other establishments, the Social Welfare Department also operates the Senior Citizen Card Scheme. At the end of March 1998, 1,181 companies, organizations or government departments had joined the scheme to provide concessions, discounts or priority services to elderly clients. Over 542,000 cards have been issued.

CONCLUSION

In conclusion, there are many considerations in planning welfare services for elderly people. It is a big challenge for everybody as Hong Kong faces a growing ageing population. Although Hong Kong has made some achievements in the past, we should not be complacent and we need to work harder. In order to keep pace with the changing world and indeed changing needs of elderly people, we are prepared to review consistently our past performance, embark on new approaches and to gather views from the public, professionals, academics, gerontologists, service providers and elderly people themselves for service improvement. Our mission is to provide appropriate, adequate, high-quality and integrated elderly services and to create an elderly-friendly environment for our elderly population so that they can really enjoy their golden age in dignity. We will keep on striving to reach these goals as we progress into the new millennium.

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HOUSING AND ACCOMMODATION FOR ELDERLY RESIDENTS

9

Housing Needs and Policy for Elderly People

Yao-Kong CHENG

INTRODUCTION

Public housing is one of Hong Kong's greatest social achievements. Over a few decades, the Hong Kong Housing Authority (HA) has succeeded in providing quality public rental housing at affordable rents for the most needy. 2.3 million people representing 38 percent of the total population live in public rental housing. Despite this achievement, there is still a large number of low income and needy groups who are inadequately housed. The elderly, among the most vulnerable groups in society, undoubtedly deserve our greatest attention. Indeed, with a fast growing ageing population, service provision for elderly people has become not only a pressing concern for the society but also a challenging task for the HA.

HOUSING NEEDS OF THE ELDERLY

Housing needs of elderly people can be gauged from two significant aspects, housing demand and housing services:

Housing Demand

According to the latest General Household Survey (Census and Statistics Department, 1997), the elderly population aged 60 and above amounts to 900,000 persons, representing 14 percent of the total population in Hong Kong. Among them, 44 percent of the elderly are living in public rental housing, representing 17 percent of the total public housing population.

Moreover, a considerable number of the elderly households living in the private sector, estimated at about 27,000 in number, are eligible for public housing. At present, over 14,700 elderly households are awaiting their turn for public housing on the Waiting List (WL). Of these, there are about 10,500 single elderly persons and 4,200 elderly households comprising old-aged couples or friends. Undoubtedly, the HA must first satisfy the housing need of these elderly people.

Those elderly people who live in substandard private accommodation but who are not yet registered on the WL constitute a hidden demand which will eventually surge when their housing problems come to surface. Examples include the residents in private old tenements and bedspace apartments who will be displaced or at least affected by urban renewal or upon the government's full implementation of the Bedspace Apartment Licensing Scheme in 1998.

Housing Services

The second and also quite fundamental aspect is the provision of housing services. This relates to the design and facilities in elderly housing which are amenable to their specific needs in terms of safety, social integration, community care and support. Equally important to the elderly residents is the provision of affordable rent as most old people are without income (as discussed in Chapter 3). Housing for elderly people should meet not only the computable housing demand but also the well-being of the elderly residents in all aspects of their living.

Policy Objectives

Many local researchers have documented the fact that the major sources of informal support of the elderly people in Hong Kong tend to come from their families (Yeung, 1992; Chow, 1996; Chi, 1996). In providing housing for the elderly, the HA also believes that co-residence of elderly and young families can generate better personal and psychological support. While elderly people with family ties will perhaps be best taken care of by their family members when rehoused together, those living alone will probably find better support if they are accommodated in a familiar and caring environment.

Based on this philosophy, the HA always encourages and facilitates families to live with and take care of their elderly members through various priority schemes in housing allocation. The HA also makes available resources for single elderly or elderly persons who prefer to live alone or

together with their elderly relatives or friends. To ensure that adequate facilities and housing-related services are appropriately provided for elderly residents, the HA regularly maintains a population profile in its estates to make policy changes according to the varying needs of the elderly in their ageing process. We also work together with other government departments and non-government organizations to help ensure there are sufficient community support services available for the elderly.

PRIORITY ALLOCATION SCHEMES FOR THE ELDERLY

To fulfil the HA's policy objective, various preferential treatments in housing allocation are given to elderly households of different family sizes and composition. They include the following schemes:

Single Elderly Persons Priority Scheme

Single elderly persons can apply at the age of 58 for accommodation through the Single Persons Waiting List under which allocation can normally be made within two years provided that they are willing to accept Housing for Senior Citizens (HSC) units and have reached 60 when allocation is due. If they opt for self-contained flats, which are rather limited in supply, they might have to wait somewhat longer, about four years. Since 1985 when the Single Persons Waiting List was opened, more than 8,800 elderly singletons have been rehoused.

Elderly Persons Priority Scheme

Alternatively, two or more related or unrelated elderly persons who agree to live together may apply under the Elderly Persons Priority Scheme. This scheme, which was commenced early in 1979, aimed at providing the old people with assisted housing as well as promoting mutual help and companionship. Again, eligible elderly applicants under this scheme can be offered flats within two years after registration. To date, about 13,200 elderly households have been rehoused via this scheme.

Families with Elderly Persons Priority Schemes

Young families who intend to live with and take care of their elderly members, can apply under the Families with Elderly Persons Priority Scheme whereby the waiting time is advanced by three years. Since its implementation in 1982, the scheme has benefited nearly 12,000 families. Alternatively, if a young family wishes to apply with its elderly parents or dependent relatives for two separate flats in the same block in a new town,

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they can make use of the Special Scheme for Families with Elderly Persons under which the waiting time is shortened by one year.

Compared with the average waiting time for public housing, which is now six and half years for normal applications, elderly applicants under these priority schemes are allocated housing much faster. Moreover, elderly persons facing an imminent housing problem with either social or medical grounds can also be offered flats through the Compassionate Rehousing quota on the recommendation of the Social Welfare Department (SWD).

Special Transfer Schemes

For sitting elderly tenants, the HA in addition adopts a very flexible approach and has transfer policies to facilitate co-living of two generations. Under the existing policies, young families in new towns are encouraged to add their elderly parents or relatives to their tenancies and apply to transfer to larger flats. Similarly, elderly parents or relatives in new towns may add their children living in urban estates and apply for larger flats. Alternatively, sitting tenants in urban estates are allowed to transfer to estates in new towns in order to live close by their older or younger families.

In line with the principle of "care in the community", these housing policies have assisted the elderly to satisfy their basic housing needs earlier. They also encourage young families to take up the caring role for their elderly members as the priority housing schemes for families with elderly persons are aimed at promoting co-residence.

HOUSING AND RELATED SERVICES

Although the HA is primarily responsible for providing housing for able-bodied elderly people who are able to look after themselves, additional facilities and other related services are in place to meet the special accommodation needs of the elderly.

Types of Accommodation

Housing for Senior Citizens

The Housing for Senior Citizens scheme in Heng On Estate in 1987 was the first attempt of the HA to provide housing with a warden service specifically for elderly people. It is conveniently located on the lower floors of a public housing estate, and was created by partitioning standard flats into two or three bedrooms. Each elderly tenant occupies a bedroom

and shares the use of the kitchen, bathroom and living room. At present, an HSC accommodates about 130 to 150 units and there is a total of 41 HSCs providing 4,570 places. A new design of HSC to house groups of six people, with larger bedrooms of 12.5m^2 to 18m^2 and with an ensuite bathroom is at construction stage.

Self-Contained Flats

Apart from the provision of HSCs, the HA also makes available self-contained flats through new construction and the refurbishment of vacated flats in old estates. Since 1994, about 2,300 small flats have been recovered from management transfer exercises. By incorporating elderly housing in annex blocks to Harmony blocks in some estates, 856 self-contained flats have been completed. In an effort to satisfy the locational preferences of some elderly persons, the HA has identified four urban sites for development of elderly housing and initiated new projects such as Small Household Blocks on infill sites adjoining existing estates and HSC developments in low-rise estate buildings. The first batch of these projects, comprising 2,800 flats, will soon be completed. These projects are characterized by the special grouping of small family flats on the upper floors, HSC units on lower floors and welfare premises on the ground floor to facilitate social integration among residents.

To optimise the use of available land resources, the HA has carried out feasibility studies in developing elderly housing as well as other related services such as community halls, welfare facilities and health facilities on sites previously reserved for community centres. Fourteen reserved community centre sites now under active consideration would provide 3,000 small household flats when developed. The pilot project at Lam Tin which it is anticipated will be completed by 2001 will provide not only residential flats and social facilities for the elderly but also a support and resource centre for the caregivers. This new planning model is a manifestation of the concept of assisting the elderly to be "ageing in place" as well as promoting "care in the community".

ELDERLY-FRIENDLY DESIGN

As a standard design for the elderly, an emergency alarm system is provided in HSCs for the safety of the elderly residents. Other facilities such as grab-bars in the corridor and non-slippery floors in toilets are installed in HSCs and in flats specifically for elderly people. Additional fittings such as laundry racks and flat modifications including ramps at entrances and

larger spaces for wheelchair users are also in place to cater for elderly residents' special needs.

The Estate Liaison Officer Scheme

The HA also provides special services for the well-being of its elderly residents. In HSCs, wardens are employed to provide 24-hour emergency support and organize recreational activities for the elderly residents. In estates with a high concentration of elderly people, the HA has launched the Estate Liaison Officer (ELO) Scheme since 1990 to serve dual functions: to provide proactive services to the elderly and to foster mutual care among elderly residents. Management staff are deployed to reach out to the elderly tenants through regular home visits to find out their needs so that referrals and assistance can be offered as appropriate. More importantly, the ELOs are missioned to mobilize elderly tenants to form mutual help groups and enhance their social interaction. Notwithstanding the fact that there are only 26 estates provided with the ELO service, social networking by volunteers has flourished in all rental estates through the HA's efforts following the implementation of a territory-wide project on Social Networking for the Elderly by SWD in November 1996. In addition to the ELO Scheme and Social Networking, the HA staff in the estates often make good use of the Estate Management Advisory Committee which comprises tenants' representatives and District Board members to organise social activities for the elderly while fostering care and concern for the elderly among tenants.

Emergency Alarm System

As part of the ELO Scheme, the HA formerly assisted needy elderly tenants to install emergency alarm systems (EAS) outside their flats. This prototype EAS largely relied on the neighbours' assistance and close monitoring of the ELOs. Since September 1996, the HA has introduced a one-off grant (to a maximum of $2,500) to finance the installation of EAS for elderly tenants living alone or for elderly households who are not receiving Comprehensive Social Security Assistance. This arrangement offers more flexibility to the elderly in selecting a safety device suitable to their different needs.

A CONTINUUM OF SERVICES

As a complement to the provision of living space for the elderly, the HA also sets aside premises to rent to voluntary agencies at concessionary rentals for establishing social and residential care facilities for the elderly.

These include facilities such as social centres and hostels for the elderly, day care centres, health centres, homes for the aged, home cum care and attention units and the like. At present, some 84,700 m² have been rented out for residential care services in 75 tenancies.

All elderly housing developments are designed to meet the specific needs of the occupants. Emphasis is placed not only on the standard fittings and design which best suit the elderly but also on service provision with a view to integrating elderly services locally as far as possible.

In terms of payment for public housing, the HA provides rent assistance to elderly tenants through the Rent Assistance Scheme (RAS). This aims to help public rental housing tenants with temporary financial difficulties by giving them half-rent reduction. Normally, successful applicants after having received RAS for two years are required to transfer to cheaper rental flats, but elderly applicants are exempted from this condition. About half of the current RAS recipients are elderly households. This suggests that the scheme is successful in relieving the financial burden of our elderly tenants.

Outreaching Service

With an ageing population, it is expected that the demands for public housing from elderly applicants will increase. To assist the elderly people living in private old tenements affected by urban redevelopment and bedspace apartments to gain access to public housing, the HA has since 1992 set up Housing Information Centres (HIC) at districts with high concentrations of elderly population and old tenements. While ELOs are providing out-reaching services to elderly tenants of public housing estates, staff of HICs also pay home visits to private tenements under redevelopment and to bedspace apartments to help the elderly residents register on the waiting list. At present, five HICs are already in operation and more HICs are planned for establishment in various districts. A proactive publicity strategy to disseminate information on public housing to assist elderly people to gain access to housing subsidy will be adopted.

Coordination in Service Provision

To ensure housing services are best delivered to our elderly clients, a Steering Group on Services for the Elderly in Public Housing Estates has been set up to review facilities in older public housing estates, services provided by the ELO Scheme and the emergency alarm system. With a view to meeting different housing needs of Hong Kong's elderly people,

the HA also actively participates in reviews of issues on housing and residential care for the elderly in the Elderly Commission and in various ad hoc committees and working groups.

NEW CHALLENGES AHEAD

The Hong Kong Housing Authority has taken active steps to provide avenues for elderly people to obtain access to quality and affordable housing according to their needs. Priority allocation schemes are in place to facilitate elderly people and their young families to apply for public housing either separately or together. Housing units for elderly residents are also specially designed to take into account the various needs of the elderly tenants. Housing services are enhanced with a view to providing comprehensive care for the elderly.

Nevertheless, the HA is not complacent about its existing housing provision and the authority realises it has to keep on reviewing policies to meet the changing needs of the elderly population. In anticipation of increasing demand from the elderly, the HA has planned to make available 30,000 public rental flats suitable for allocation to older people by the year 2001-2. To help develop family support of the elderly, the HA will review the existing housing allocation arrangements to encourage families to live with their elderly members based on the principle of equitable allocation of available resources. With regard to the strengthening of social support, the HA will closely work with other government departments and non-government organizations to provide integrated and coordinated housing and related services for the elderly as far as possible.

It has to be recognized that Hong Kong's elderly population have different needs. While the promotion of family and community support will enable more old people to stay and receive care in the community, some may require institutional accommodation if they are not able to look after themselves or if they may not be taken care of by their families. In fact, accommodation requirements of elderly persons are partly determined by their health condition. Sometimes, it may not be appropriate to allocate residential housing according to their preferences, particularly when the elderly applicants become frail whilst waiting for allocation. Conversely, elderly persons receiving institutional care for minor ailments can be accommodated in housing units hence releasing the spaces for the most frail people if sufficient community support services are provided. A central register based on a health selective system for applying public rental housing and residential care homes to facilitate suitable and efficient

allocation of accommodation to the elderly is being considered. However, this surely requires concerted efforts among the HA, the SWD and the Health and Welfare Bureau as well as other welfare agencies.

Care for the elderly is an important policy objective of the Government. The HA is proud that it has an important contribution to make in this mission with other service providers to build up a pleasant, secure and caring living environment for our senior citizens.

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10

Public Housing Design for Senior Citizens

Rosman C. C. WAI

INTRODUCTION

With a fast growing ageing population, there is now a growing awareness of the housing needs of the senior citizens and of the responsibility of the community to provide them with a better living environment. To meet the demand and rising expectations of people, the Housing Authority (HA), the largest housing provider in Hong Kong, has committed to improving the standards and living conditions of housing for the senior citizens. It has a number of design objectives in housing for elderly people. In particular, the HA has emphasised certain design standards, social mix and an integration with services within housing estates. This chapter concentrates on issues related to the design of accommodation and complements the previous chapter on housing needs and policy.

With regard to design standards, since senior citizens may have special needs due to their age or possible mobility problems, a set of guidelines and specifications on design covering domestic flats, common facilities and external works has been developed. In terms of mixing with society, co-residence of senior citizens and families can encourage social contact of the senior citizens so that they have the feeling of being part of the community. Families can offer immediate assistance to the senior citizens in case of emergency. To help with service access, an integrated approach in estate planning is adopted. As noted in the previous two chapters, there is also a close coordination between the Housing Department and the Social Welfare Department in the provision of residential care facilities and other

care services within housing estates especially when the health of residents may health deteriorate over time.

HOUSING PROVISIONS

The HA undertakes the provision and management of residential accommodation for able-bodied senior citizens, focusing its attention principally on those who can basically take care of themselves. For more frail elderly people, the SWD provide them with more services such as counseling and nursing care. Currently, housing for the senior citizens is provided through two main schemes, Housing for Senior Citizens and Small Self-Contained Flats (Figures 10.1-10.3). Details of the types of housing provided in each are given below.

Figure 10.1   Housing Provision for Elderly People by the Hong Kong Government

HOUSING FOR ELDERLY

HOUSING DEPARTMENT
able-bodied

SOCIAL WELFARE DEPARTMENT
frail elderly

Housing for Senior Citizens
(HSC)

Small Self-Contained Flats
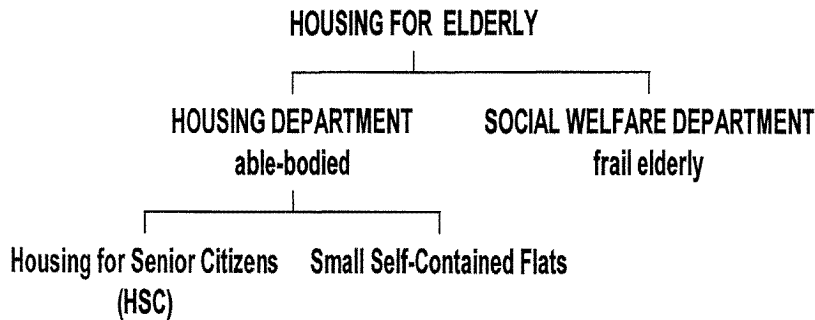
HOUSING FOR SENIOR CITIZENS

This comprises accommodation with warden services to attend to emergency situations and the organization of recreational activities for residents. This type of accommodation is restricted to a maximum floor level at 24m above ground as permitted under the Residential Care Homes (Elderly Persons) Regulations. There are three types of Housing for Senior Citizens developed with different designs and varying degree of communal services sharing (Figure 10.2).

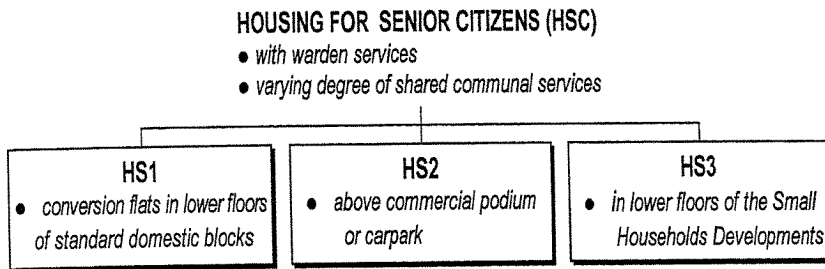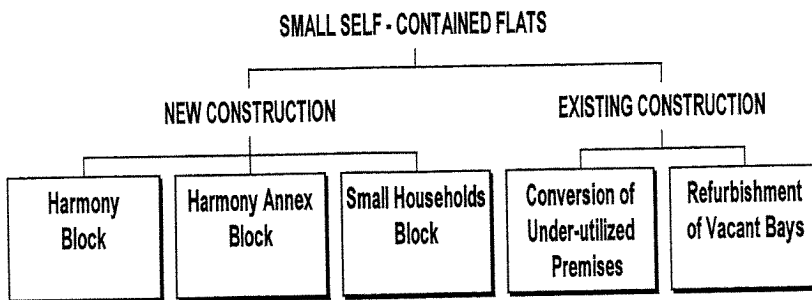**Figure 10.2   The Housing for Senior Citizens Scheme**

HOUSING FOR SENIOR CITIZENS (HSC)
- *with warden services*
- *varying degree of shared communal services*

HS1	HS2	HS3
• *conversion flats in lower floors of standard domestic blocks*	• *above commercial podium or carpark*	• *in lower floors of the Small Households Developments*

Figure 10.3   The Small Self-Contained Flats Scheme

SMALL SELF - CONTAINED FLATS

NEW CONSTRUCTION   EXISTING CONSTRUCTION

Harmony Block	Harmony Annex Block	Small Households Block	Conversion of Under-utilized Premises	Refurbishment of Vacant Bays

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Housing for Senior Citizens Type 1 (HS1) –
(conversion flats in lower floors of standard domestic blocks)

These are the earliest type of Housing for Senior Citizens of which the first project in Heng On Estate, Shatin, was completed in 1987. It is located in the lower floors of the standard housing blocks for the convenience of the senior citizens, who can enjoy various facilities of the estates. Each HS1 provides accommodation for from 130 to 150 senior citizens in groups of two to three, by converting the standard 2-bedroom or 3-bedroom flats of the standard housing blocks. Bedroom size ranges from $6.1m^2$ to $8.3m^2$ with common living area, kitchen and bathroom (Figure 10.4). At present, there is a total of 41 HS1 providing 4,570 places.

Housing for Senior Citizens Type 2 (HS2) –
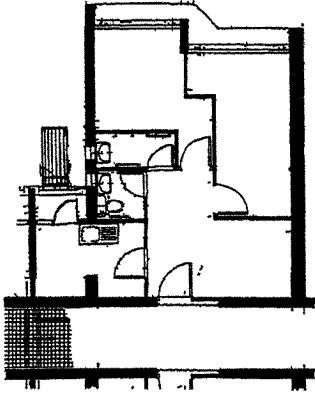## (above commercial podium or carpark)

These involve a new low-rise development located above a commercial podium or carpark so as to maximize land resources (Figure 10.5). The design is based on a modular concept being able to suit different site configurations. Each module is a cluster of bedrooms and communal facilities grouped around a courtyard with the bedrooms facing internally. This can provide a domestic setting, without the feeling of an institutional environment. Toilets, kitchens and staircases act as buffers to noise and are located on the periphery. Each HS2 accommodates nearly 200 senior citizens and bedroom size range from $5.0m^2$ to $6.8m^2$. In general, two elderly people share a bathroom and communal kitchen, dining areas, common rooms and laundry facilities are provided. The first HS2 in Lam Tin is scheduled for completion in early 1998.

Housing for Senior Citizens Type 3 (HS3) –
(located in lower floors of the Small Households Developments)

This type is located at the lower floors of the Small Households Developments (SHD) providing 120 to 150 units for elderly people (Figure 10.6a). The design is based on two standard modular flats which can be arranged differently to suit small sites. Individual modular flat of size $12.5m^2$ for single senior citizen and of size $18.1m^2$ for couples are arranged in "house" groups of approximately six persons (Figure 10.6b). Each modular flat has an ensuite bathroom whilst the residents will share a kitchen, dining room, common room and laundry facilities. The first batch of HS3 is scheduled for completion in early 1998.

Figure 10.4   Housing for Senior Citizens Type 1 (HS1)

* *converting standard 2B or 3B flat of standard domestic block*
* *bedroom size ranges from 6.1m² to 8.3m²*
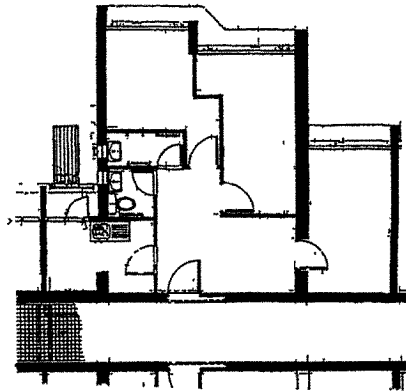
Converted 2B Flat   Converted 3B Flat

Figure 10.5   Housing for Senior Citizens Type 2 (HS2)

* *above commercial podium or carpark*
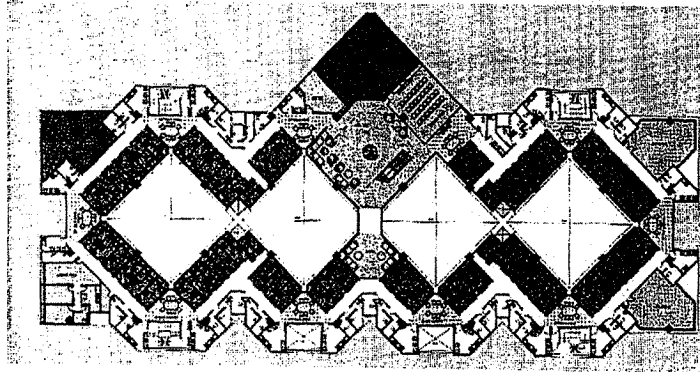* *provide accommodation for nearly 200 senior citizens*

Figure 10.6a   Housing for Senior Citizens Type 3 (HS3) (a)

* *in lower floors of Small Households Developments*
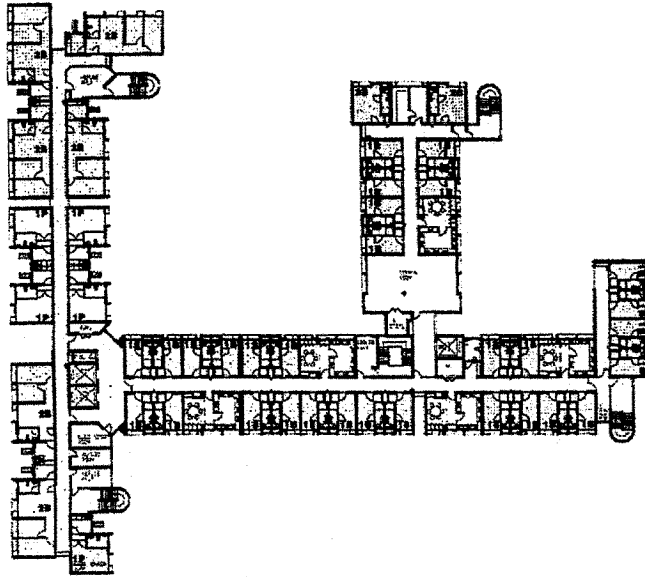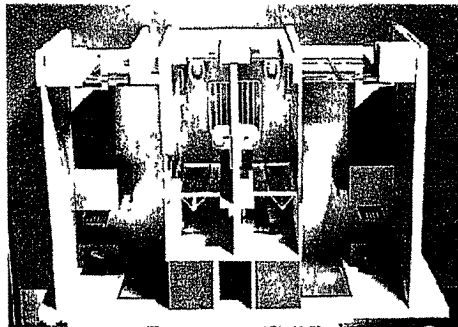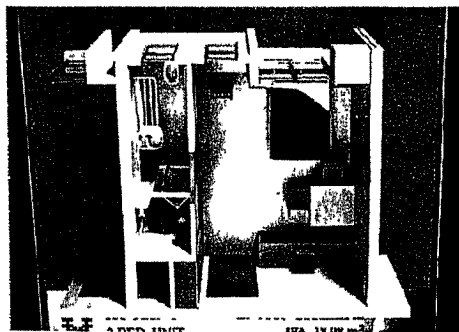* *provide 120 to 150 units for senior citizens*

Figure 10.6b   Housing for Senior Citizens Type 3 (HS3) (b)

* *modular flats are arranged in "house' group of approximately 6-person*

1 Person Flat - 12.5m²

2 Person Flat - 18.1m²

SMALL SELF-CONTAINED FLATS

The other main stream of housing provision for the senior citizens is the small self-contained flats which come with their own kitchen and bathroom. They are provided through new construction or in existing developments by the refurbishment of vacated flats in old estates.

New Construction

There are currently six different flat types provided through Harmony Block, Annex Block and Small Households Developments. To encourage social contact and mutual help as mentioned earlier, it is essential to maintain a social network for the senior citizens in the these self-contained flats. A different mix of flats is therefore allowed in each block.

Harmony Block - One Person Flats

When Harmony Blocks were built in 1989, it was the first time purpose-designed small self-contained flats were introduced. These one person (1P) flats are for general allocation to small households. They can be fitted out to suit the needs of the senior citizens and are conveniently located close to the lift core or staircase. The area of the flat is about 17m² (Figures 10.7a and 10.7b).

Harmony Annex Block - One or Two Person (1/2P) and Two Person (2P) Flats

These are a 21-storey block with 140 to 180 self-contained flats designed to link to Harmony Blocks for economy and efficiency. The annex block will share the lift, water and electricity supply with the "Mother" block. There are six configurations of annex blocks making use of two standard modular flats, namely 1/2 person (1P/2P) flats of size 17.36 m² and 2 person (2P) flats of size 22.06m² (Figures 10.8a and 10.8b). Although the flats of the annex blocks are for general allocation to one and two person households, they have been specifically designed to meet the needs of senior citizens and are able to provide wheelchair access with minimum conversion.

Small Households Block - One or Two Person (1/2P), Two Person (2P) and Wheelchair Flats

The Small Households Block is up to 21-storeys and consists of specially designed self-contained flats for senior citizens and a small number of family flats to allow a social mix. Wheelchair units are provided at a rate

Figure 10.7a   Small Self-Contained Flats – Harmony Block (a)

* *1P flats can be fitted out to suit the needs of senior citizens*
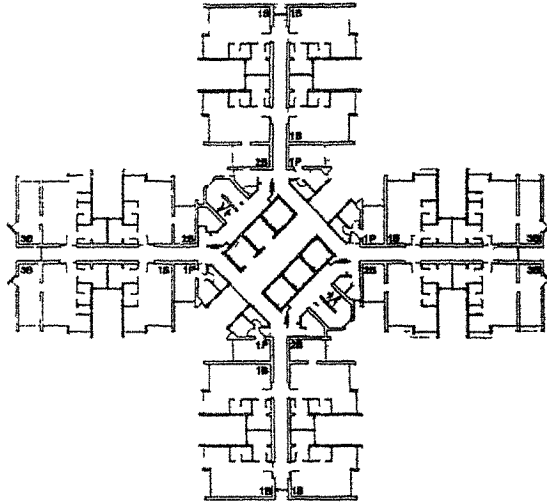* *conveniently located close to lift core or staircase*

Figure 10.7b Small Self-Contained Flats – Harmony Block (b)

❋ *1person flat (1P) of size 17m²*
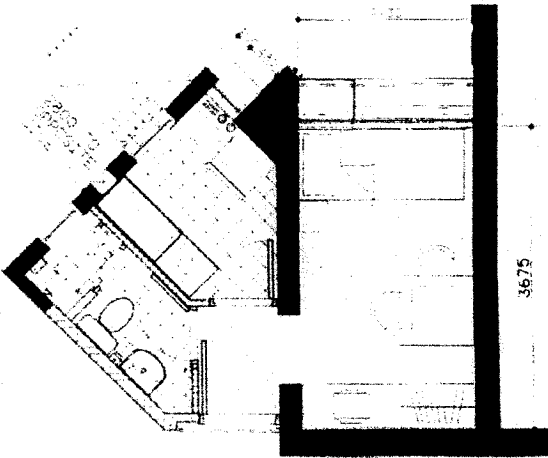
1 Person Flat - 17m²
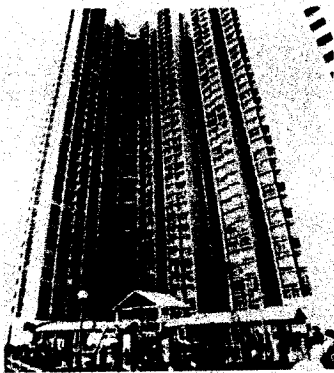
Figure 10.8a   Small Self-Contained Flats –
Harmony Annex Block (a)

* *link to Harmony Block for economy & efficiency by sharing service*
  with 'Mother' block
* *provide 140 to 180 flats*

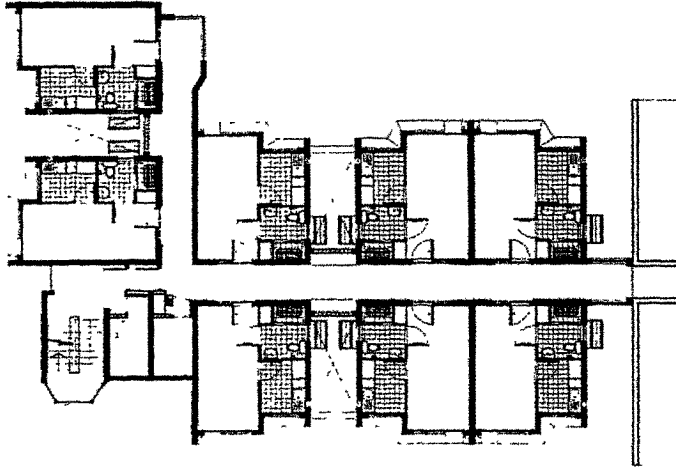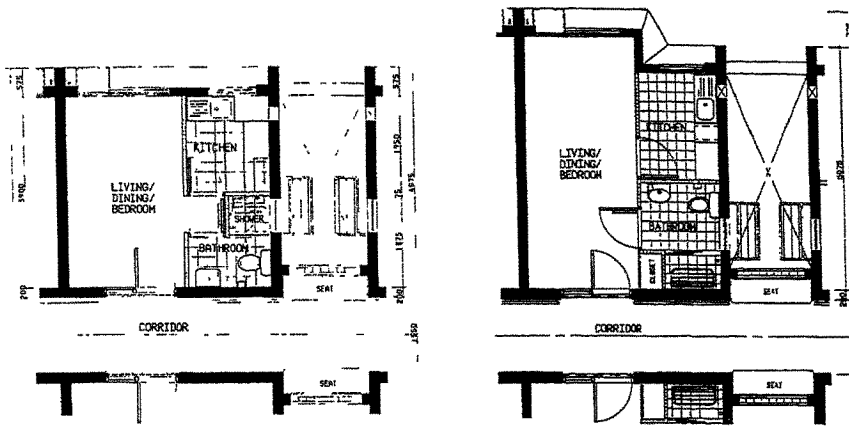**Figure 10.8b   Small Self-Contained Flats –**
Harmony Annex Block (b)

* *1/2 person (1P/2P) flat of size 17.36m^2*
* *2 person (2P) flat of size 22.06m^2*

1 / 2 Person Flat - 17.36m^2 2 Person Flat - 22.06m^2

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of 5%. Welfare premises can be located on the ground floor to offer services for senior citizens while the lower floors of the building are designed to accommodate the Housing for Senior Citizens (HS3) with warden services as outlined above. The Small Households Block is developed by assembling standard modular flats to suit different site configurations including the use of small sites in the urban areas. There are three types of modular flats, namely one or two person (1P/2P) flats of size 17.6m², 2 person (2P) flats of size 22.5m² and wheelchair units of size 22.5m² (Figures 10.9a and 10.9b).

Existing Construction: Conversions for Immediate Solutions

In order to cater for the immediate great demand of housing for elderly residents, short-term solutions are adopted, involving converting suitable under-utilized premises and refurbishment of vacant bays in existing public housing estates into housing or related services for the senior citizens.

ATTENTION TO DETAIL

Particular attention is now paid to architectural details and building services to ensure that the design can cater for the needs of the senior citizens. This applies even to the converted flats if the situation permits and involves the following:

Emergency Alarm Systems

As noted in the previous chapter, some senior citizens may have difficulty in seeking immediate help from others when they encounter any accident inside the flats. Emergency alarm systems are considered useful in reducing delays in getting attention. Details of the provision are now under consideration by a special working group.

Bathrooms

Research indicates that the bathroom is a room in which many of the accidents involving senior citizens arise (see also Chapter 2). Design features help to mitigate the results of possible accidents. For example, doors are therefore designed to open out to ensure that access will be possible to assist residents in case of emergencies; non-slip floor finishes and grab bars are provided and the height of shower trays is lower than in family flats. Adjustable shower heads with a mixer valve to avoid the possibility of scalding are provided and, in the wheelchair units, a fold-down shower seat is one of the standard provisions.

Figure 10.9a   Small Self-Contained Flats –
Small Households Block (a)

＊ *by assembling standard modular flats to suit different site configuration*

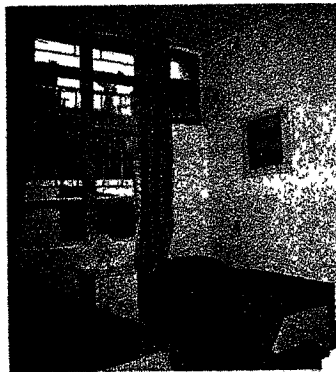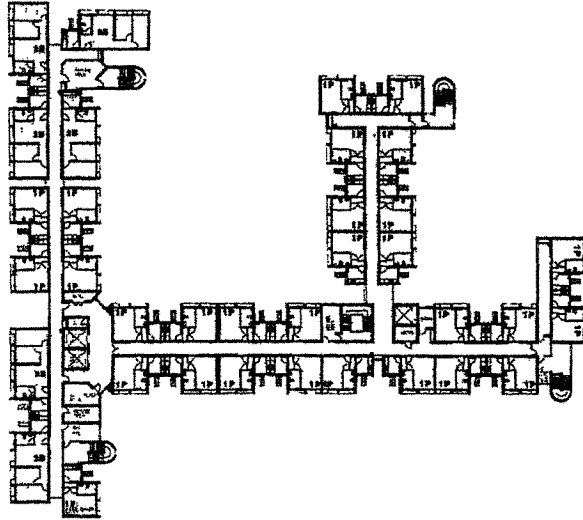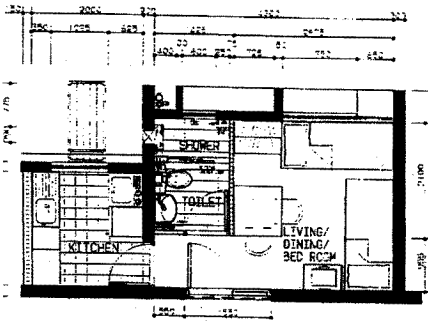＊ *wheelchair unit are provided*

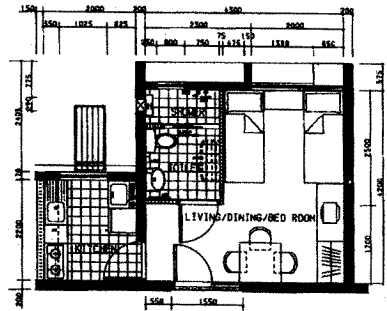

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Figure 10.9b   Small Self-Contained Flats –
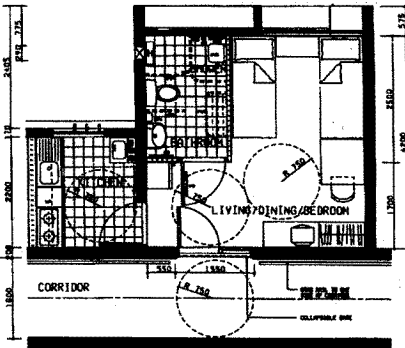## Small Households Block (b)

* *1/2 person (1P/2P) flat of size 17.6m²*
* *2 person (2P) flat of size 22.5m²*
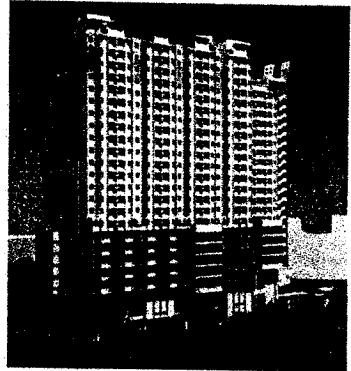* *wheelchair unit of size 22.5m²*

1P / 2P Flat - 17.6m²

2P Flat - 22.5m²

Wheelchair Unit - 22.5m²

Kitchens

Kitchens are designed with sufficient space for walking aids and for wheelchair access. Worktops are slightly lower than those in family flats.

Access to Buildings and to Flats

Entrances to buildings are ramped and provided with handrails and door widths are suitable for residents using walking aids or wheelchairs. Grab rails are provided in public corridors. Lever handle door furniture are used for convenience of the elderly residents.

Enhanced Fire Services Installations (FSI) and Lighting

For Small Households Blocks which are mainly designed for senior citizens, enhanced FSI provisions are installed such as domestic sprinklers, a smoke detector in the living room, a heat detector in kitchens and sprinkler systems in public areas. A refuge area is provided adjacent to escape staircase to facilitate evacuation in view of the fact that some senior citizens may have mobility problems. In terms of lighting, public area lighting will be brighter to for the benefit of residents with deteriorating eyesight.

Electrical Switches and Socket Outlets

Electrical socket outlets are placed at 800mm from the floor level which is higher than those in family flats to avoid the need for senior citizens to bend too low. Large rocker type switches are used to allow easy operation even when an elderly person has arthritis. These switches are placed at 1,100mm from the floor for easier operation.

Allow for Conversion for Wheelchair Use

The small flats in Small Households Blocks and New Annex Blocks have been designed to allow for minimum conversion for the use of a wheelchair so that residents can remain in their flats even if they have develop a minor and perhaps temporary mobility difficulty.

AN INTEGRATED APPROACH

As noted in the previous chapter, in addition to the provision of living accommodation for elderly citizens, social centres, day care centres and multi-service centres for the elderly are provided. These offer day to day social and welfare facilities and are located in the lower floors of the residential blocks to ensure sufficient community support services to cater for the senior citizens' needs at various stages. The more frail residents

will be referred to the SWD for places in specialized care facilities run by Non-Government Organization (NGO), such as home cum care and attention units and the care and attention homes.

To attempt to achieve continuous improvement in housing design, there is a mechanism in the Housing Department to collect feedback from users to review and improve the standard provisions and design. In addition, a Steering Group on Services for the Elderly in Public Housing Estate has been set up to review facilities and services for the senior citizens and to advise on changes and needs of the senior citizens.

THE WAY FORWARD

As discussed in earlier chapters, in future planning and provision of services for senior citizens, the HA will monitor regularly the profile of the elderly population in public housing estates. It should therefore be in a position to respond to the needs and aspirations of the senior citizens in a timely manner. The concept of multi-services provision will feature in the future planning. The design of public housing will be developed for residents with a significant proportion of senior citizens so as to meet their needs at different stages of their aging process. Hong Kong's senior citizens, after serving the community for so many years, deserve society's utmost care and attention. It is our responsibility to continue to improve the facilities and services in the public housing estates to cater for their needs and to offer them necessary assistance and show our appreciation of their contribution to society.

11

Design of Housing for Elderly People - The Jockey Club Tuen Mun Home for the Aged Blind

Patrick S. S. LAU

Longevity has always been in the prayers of the Hong Kong people who visit the Wong Tai Sin Temple. Little did they imagine that their prayers would indeed be answered. Recent statistics have shown that, next to the Japanese, we, the inhabitants of Hong Kong, live longer than people elsewhere in the world. One may begin to wonder about such statistics; the advancement of medical technology and the promotion of health awareness have, in fact, contributed to the reason for increased human life span. While we count our blessings, the flourishing number of elderly people and their problems can be a cause for concern. The Hong Kong Government is currently addressing these issues and working towards possible solutions. Among these consequences, the deprivation of senior housing appears to be the biggest dilemma. Momentous adjustment is therefore required since many of the seniors' problems emerge from the lack of proper accommodation.

As noted elsewhere in this book, elderly housing in Hong Kong falls into a number of categories. The most common type is run by private or subsidized organizations; older single people live together and meals are provided for them for a monthly fee. The Housing Authority has also provided one- or two- person flats where the elderly perform their own chores. There are also the famous cage dwellings in the denser parts of Hong Kong, where accommodation and conditions are extremely poor. However, the most needed form of housing is that providing nursing with personal care and attention. The Tuen Mun Home for the Aged Blind

consists of a combination of these types, including an old people's home, "care and attention" residence and an infirmary unit for a total of 252 residents. The Jockey Club and other charitable organizations have covered the capital costs of the project. The Government provides staff salaries and subsidizes its operational expenses. The project commenced construction in March 1994 and was completed in early 1996. This chapter focuses on the various design and architectural features of the Tuen Mun Home. It may well be a project that could be repeated elsewhere.

LOCATION AND ADJACENT FACILITIES

Tuen Mun, the new town formerly known as Castle Peak, offered a tranquil yet urban environment well suited to elderly people who no longer belong to the work force. The Hong Kong Society for the Blind in response to the need of elderly housing was offered a site to develop. The Home is located at the junction of Tsing Lun Road and Tsun Wen Road in Tuen Mun. This location is well served by public transportation, with a light-rail transit stop, right in front of the Home. Many elderly persons find public transport inconvenient, hence the availability of the wide range of transportation at this location solves many of their problems. To the north-west of the Home is Tuen Mun Hospital which provides medical services; to the east, a local open space buffers between the Home and the fire and police stations beyond. The public housing estate situated to the south- west provides commercial facilities within walking distance.

DESIGN CONCEPT

The design responds to the site and the approved accommodation schedule from the Social Welfare Department. The Home can accommodate 252 visually impaired elderly people: 50 for an old people's home, 152 for a care and attention and 50 at the infirmary. Any visually impaired person over the age of 60 can apply through SWD and can be admitted after a family visit and medical check up. The Home will provide 24-hour medical care, attention therapy, social activities, meals, laundry and counselling. Three square blocks are integrated to form the basic concept of the building. The central block mainly houses key facilities with the two adjacent blocks of residential units focusing on courtyards. The presence of these courtyards forms an oasis within the building to suggest a natural and peaceful environment in the urban setting in which the Home is situated. The courtyards also allow opportunities for interaction, which is an important aspect to the internal organization.

The ground floor of the building houses the administration, central services and staff quarters which will provide control and security to the residents. A central core serves as a circulation node for residents accessing upper residential floors. The lower floor has a therapy pool, with access to a garden specially designed for the residents.

In the residential section, the sleeping units are grouped around an open courtyard to which residents can relate as their own interior "neighbourhood". Due to the local climatic conditions, these courtyards have been designed to provide good natural and cross ventilation in the building, and to simultaneously reduce the costs necessary for cooling. It is envisaged that the activities and spatial experience of these courts would reflect the change of seasons, public festivals, social recreational programmes or simply the variations of day to day functions. Skylights from the roof will create patterns of light to dark to augment a variety of tactile and visual sensations.

The first and second floors are occupied by the residents of the Infirmary Units and "Care and Attention Home" with associated living and dining facilities, visiting doctors' office and a treatment/exercise room. Bedrooms are specially designed; each accommodates four to six residents, with attached bathrooms. Hospital beds are used for comfort and convenience. All rooms are equipped with heating and air conditioning. The third floor is for the old people's home and the top floor has a large assembly hall for different kinds of gathering. Terraces on the roof and garden on the ground floor also serve as outdoor open spaces for the residents.

The image of the building has been made more "residential" and designed to have a home-like atmosphere by breaking the building into smaller blocks. The roofline, entrance canopies, balconies and facade are articulated to bring the building down to appropriate human scale.

DETAILED ARCHITECTURAL DESIGN

Elderly people may have poor eyesight, mobility, and other weakened capacities. For the more fortunate individuals who are still physically healthy, simple movements such as travelling form room to room seem to be an effortless maneuver. However, for those who are physically challenged, special aids may be required to help them carry out these actions. Therefore, it becomes crucial for the design of the Home to be easily accessible by the visually impaired as well as physically handicapped

residents. Special attention has been paid to the details of the building with audible features, acoustic control and the usage of safe rounded corners throughout.

Sealed double-glazing are used in all windows to dampen traffic noise. This also facilitates energy efficiency air conditioning in the summer and heating in the winter. The roof is shielded from the sun by an additional trellis, which givers shade to the roof garden as well as the rooms on the top floor. Computerized security, building services and fire control systems are used and are also connected to the nearby fire station.

Other detailed features in the building are also specially designed for safety and comfort where internal furnishings are palpable and can easily be located by physically impaired individuals: the provision of two sets of handrails (as opposed to cold stainless steel) turn upward to indicate the entrance of a door. Additional details are also included to enhance necessary actions - telephones are made with large number pads, light switches are brightly coloured, and floors are lined with tactile surfaces both inside and out - so the residents can actually 'feel' where they are.

The following diagrams and plans (Figures 11.1-11.5) show the concept of the Tuen Mun Home, with floor layouts and an example of a typical bedroom plan. The Ground Floor plan indicates the location of the Home at the junction of two main roads, and shows the basic layout and orientation. The concept plans show, particularly in the cross-sectional architectural sketch, the relationships of the home with the external environment and atmospheric conditions.

Figure 11.1   The Jockey Club Tuen Mun Home for the Aged Blind: the Concept
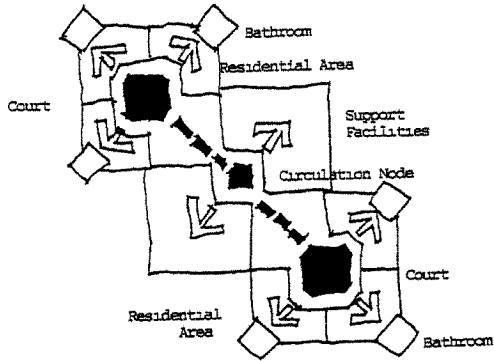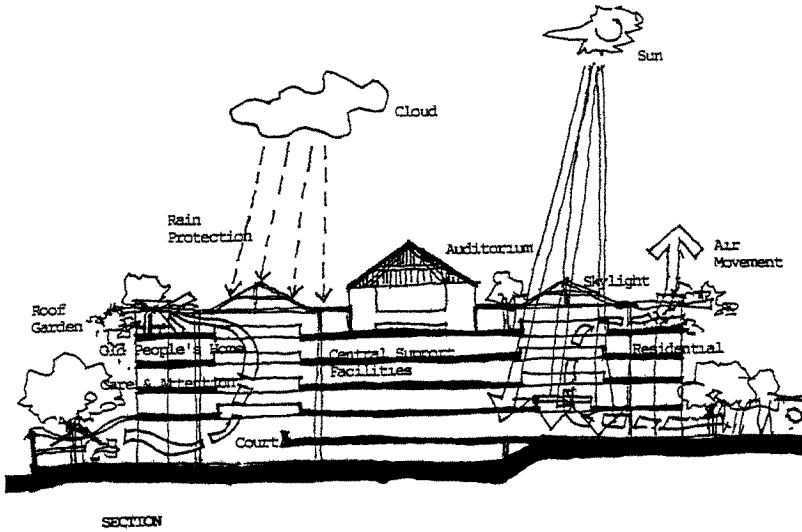
Figure 11.2   Ground Floor Plan
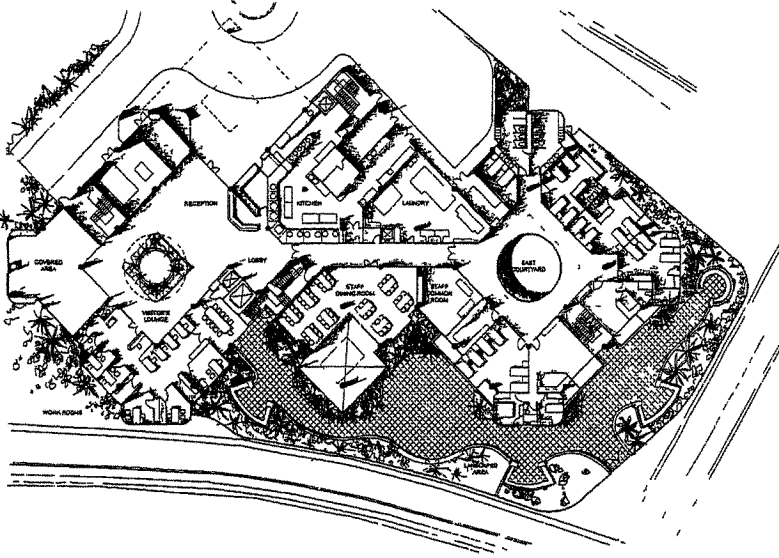
Figure 11.3   Second Floor Plan
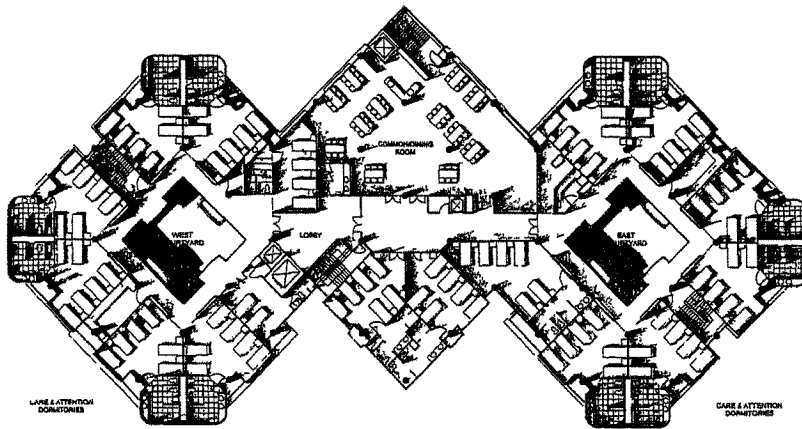
Figure 11.4   Typical Bedroom Plan
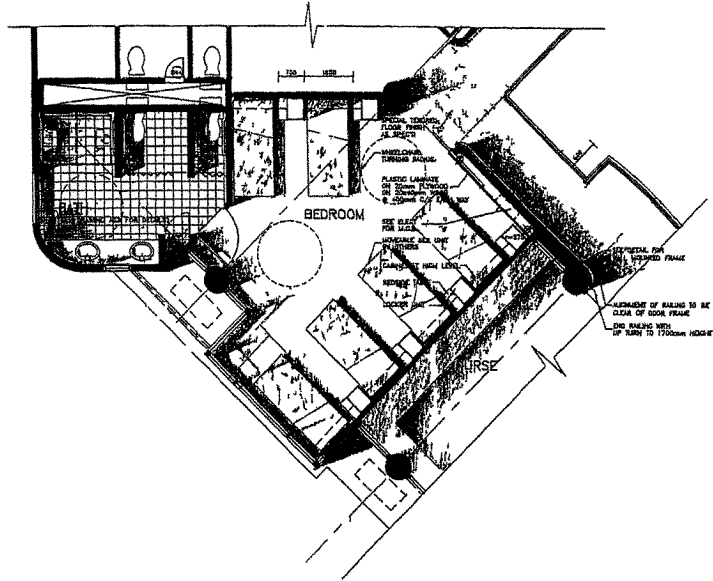
Figure 11.5   Fourth Floor Plan

Patrick S. S. LAU
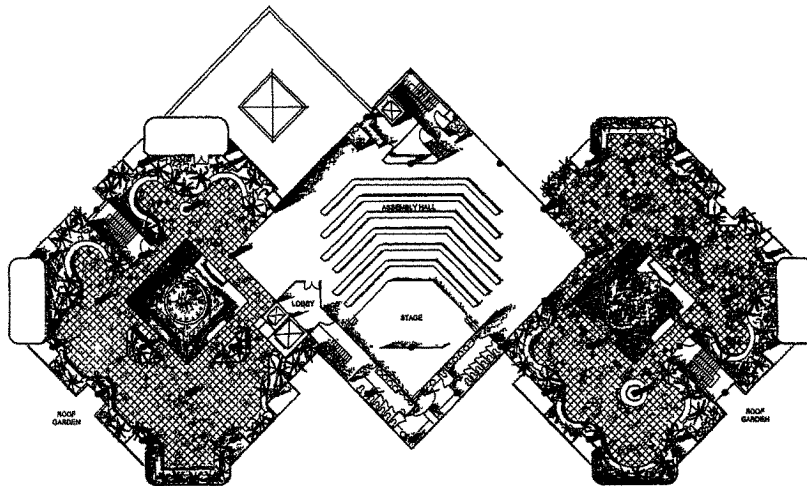
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12

Housing for Elderly Residents in Hong Kong - Options for the Private Sector

Danielle PACAUD

OBJECTIVES

This chapter reports a study which aims to explore new possibilities for independent and assisted living housing for elderly people, integrated into the family housing communities of private residential developments in Hong Kong. An intention is for an older relative to be able to live independently but within 2-3 minutes walk from their relatives, possible only in a high density situation. The study aims to develop model(s) for high density housing for the context of Hong Kong. Principles will be defined for design guidelines from the perspective of maximising a high quality of life for elderly residents. Space standards will be proposed. The study aims to assist in providing leadership in this area for the wider community through a hypothetical model of City One Shatin, adapted to accommodate a balanced community of elderly people.

RESEARCH METHODOLOGY

A process was defined for the study. (Figure 12.1)

This chapter represents an interim stage in the research which has so far considered case studies, drawn out issues for Hong Kong, and established goals for the design stage. Projections have been deduced from available statistics for a balanced provision of housing for elderly people at City One Shatin. Three levels of provision have been defined. Model plans have been drawn up giving desirable space requirements which are larger than

Hong Kong Housing Department standards. Together these give a hypothetical brief for a design. A seminar was held in March 1998 to gain feed back from other professionals which is incorporated in this Chapter. The next stage of the research will apply these findings to a site in City One Shatin to model an approach to housing for elderly people in a high density high-rise private housing estate in Hong Kong.

Figure 12.1   Research Methodology
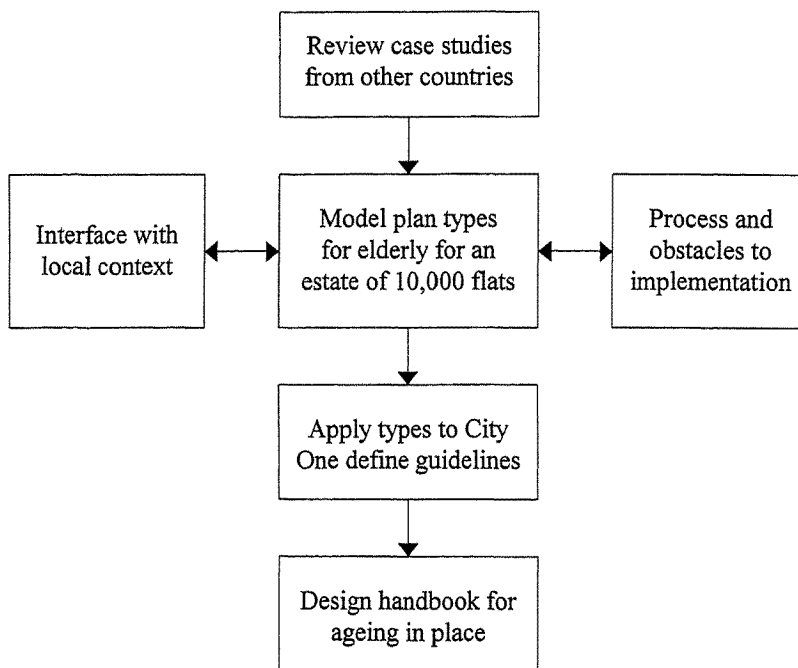
CASE STUDIES

The first step of the research has been to look at case studies to explore existing approaches to housing for elderly people. Case studies have been considered from Singapore, the United States, the United Kingdom, Canada, Israel, the Netherlands, Denmark and Hong Kong. More and deeper research has been available about housing provision and design for elderly people in the United States and northern Europe than in Asian contexts. This is in part due to the earlier demographic changes towards an ageing society, but also because the most readily available sources are American. This may also reflect working in the English language. However,

certain relevant research was found about living arrangements in Asian contexts, concerning preferences, economic factors and the transition from a rural to a dense urban way of life.

THE AMERICAN EXPERIENCE

"Older people show enormous variability in interests, capacities and competences. Part of the rationale for housing programs directed toward this population is to address the need for greater alternatives as it is represented in this variability. The major problem in conceptualizing residential design for older people is in the fact that aging is a process while most building programs assume an essentially static state for users and usage." (Howell, 1980, p.2)

Independent Living

In the United States, a considerable amount of excellent work has been published on post-occupancy evaluation of independent living accommodation for elderly people, notably beginning with Sandra Howell's (1980) study, *Designing for Ageing*. This work highlights several principles that may be respected to avoid some of the misguided directions, and ensuing misery, of the American experience. Fundamentally, Howell reflects that ageing is a process and the biggest problem is that providers and designers tend to look for a static condition to work to.

Nursing Homes

Benyamin Shwarz (1997) clearly identifies the problem of using a medical model for long-term care, the nursing home. This practice clashes with efforts to satisfy non-medical needs of frail elderly residents and forces compromises in the design process.

"Nursing homes are the last refuge in our society's long term care for the elderly, the frail, and those with chronic illness and disability. It has been said that a society can be judged by how well it provides for its vulnerable populations. If the depressing and frightening setting of the American nursing home reflects our collective moral heart - it is fairly grim.....it seems that we have achieved the worst of both worlds: an institutional setting that goes too far while it also does too little for its residents." (Schwartz, 1997, p.343)

He demonstrates through three case studies how the unsuitable regulations and arduous subsidy system result in the *"wicked compromises*

which are made in the design process". It is little wonder that thirty percent of Americans would rather die than live in a nursing home, according to a recent survey in the Journal of the American Geriatrics Society. Schwarz urges changes that should reflect the notion that growing old is part of the human condition and not a medical problem.

Congregate Housing

This is the American term for assisted independent living with a minimum of five hot meals and personal care aid, but including no "skilled" care. *"Congregate housing may be the most appropriate environment for most elderly people even if they do not take up all its services. A study in the US showed that 69% of subsidized housing respondents preferred this model over moves to family or friends(17%), nursing homes (9%) or other settings (6%), if disability forced them to move. The main item in altering independent housing to congregate housing is the provision of equipment, catering for meals and house keeping staff. Conversion can be incremental adding staff as the number of people needing more assistance increases."* (Blank, 1992, p.134)

Assisted Living

However, also readily available in the American literature is design guidance for a residential model of care provision well developed in the northern European countries and translated into the American context. An excellent example is Victor Regnier's book *Assisted Living Housing for the Elderly*, in which he defines assisted living:

> *"Simply stated, assisted living is a long term care alternative which involves the delivery of professionally managed personal and health care services in a group setting that is residential in character and appearance in ways that optimize the physical and psychological independence of residents."* (Regnier, 1994, p.1)

NORTHERN EUROPEAN EXAMPLES

Many countries in Europe, which experienced early demographic shift towards an ageing society, initiated housing programs for the elderly about fifteen to twenty years before the United States. *"European policy choices have traditionally emphasized non-institutional alternatives for the frail. Older frail people especially in Scandinavian countries, live in dramatically larger and more private residential environments. Widespread societal attitudes about ageing in place and the absence of punitive*

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regulations that force patients to relocate as their health care needs increase have led to an enlightened attitudes about caring for older people in a range of community contexts. " (Regnier, 1994, p.6)

Neighbourhood Based Approach

By sharing common services with the wider community, assisted living schemes in northern Europe add to the social welfare of the surrounding community. Swimming pools, restaurants, health services, physical therapy equipment, recreational programmes and meeting room space are designed to be used both by residents and by older people living in the surrounding neighbourhood.

Board and Care Arrangements

Board and care housing is the most common non-institutional alternative for older frail people in the United States. This kind of arrangement has a bad reputation because of abuses of vulnerable people. This is especially so in some states where economic pressures have led government to relocate people from mental institutions or nursing homes to save money. But, in Sweden, the small group home is a professional model of board and care housing for 6 to 8 people. In one example, the Strand in Arvika, the upper floor accommodates families while the ground floor is for mentally and physically frail elderly people, with a shared laundry. A success in the United States, along similar lines, is Sunrise Retirement Community in Arlington, Virginia. Residents are typically upper-middle-income people paying from their private means with family members nearby. The housing provided is small but private units in residentially styled buildings located in attractive neighbourhoods.

Keeping Elderly People Independent

The commitment to keeping older people independent begins with a broadly based home care system and is backed up by service housing for those with the most intense needs. Only severely impaired dementia victims with behavioural problems and complicated medical cases are considered to need institutionalisation. In the Netherlands professionalism is high in care for the elderly, reflecting the society's positive assessment of formal care providers and their central role in caring for people who are sick and weak. Care professionals are given greater autonomy than in the states and rarely find their initiatives stifled by regulations that confuse their commitment to helping older people.

Keeping Elderly People with Their Families

In addition, the broad range of community care supports such as adult day care, respite care and homecare make it possible for families to more easily manage elderly frail relatives at home. This is in spite of high levels of female employment that make it difficult for working daughters to accept extended responsibility for aged parents. The strategy is to deliver health and personal care services to both purpose built housing for frail elderly people and to older people living in the community. This of course is the outcome of the commitment in the Scandinavian countries to provide resources for people in older age as well as at other economically non-active stages of life. Funding comes from a combination of national health care insurance and housing subsidies.

THE EXPERIENCE IN TAIWAN

Hong Kong's experience of attitudes about living with the family may be more consistent with evidence from studies in Taiwan. A number of studies have been made by the Population Studies Center at the University of Michigan which explore the factors affecting living arrangements for elderly people in Taiwan, as well as similar studies in Singapore, Thailand and the Philippines. Abstracts from three relevant studies are quoted:

Living Arrangements of the Elderly in Taiwan - Qualitative Evidence

"This paper reports on attitudes toward living arrangements of the elderly in Taiwan......Results confirm that co-residence with adult sons continues to be the preferred arrangement; however, independent living is also attractive to many elderly so long as they enjoy good health and adequate finances......Both elderly and younger participants recognized that smaller family size, differences in education, migration, high cost/ shortage of housing in urban areas, and female labor force participation were bringing change in traditional arrangements. " (Lee et al, 1993, p.1)

Patterns of Support among the Elderly in Taiwan and their Policy Implications

"Taiwan's rapid transformation from an agricultural to a modern industrial state, coupled with sharp demographic changes toward lower fertility and greater urbanization, has many implications for the social support of elderly people. The number and proportion of

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the elderly are rising at the same time that there is a shift away from the traditional pattern of extended family households that have historically provided the context for social support. Initial tabulations have revealed that the degree and sources of support vary considerably across the elderly and are affected by many factors." (Hermalin et al, 1990, p.1)

Division of Family Property in Taiwan

"Since property ownership affords the elderly some control over resources and perhaps even support and respect from potential caretakers, examination of the decision to transfer property to children can help us gain insight into the underlying dynamics of intergenerational exchanges between the elderly and their children. ......we find that the likelihood of property division is positively related to age, widowhood, natality in Taiwan, rural residence, and the number of living children, and negatively related to education. After controlling for other characteristics, our results show that widows are more than twice as likely as widowers to have divided all their property. These results lend statistical support to findings in the ethnographic literature on the Chinese family." (Li et al, 1993, p.1)

EXISTING EXPERIENCE IN HONG KONG

Public Housing for Elderly People in Hong Kong

In response to demographic ageing, the Hong Kong Housing Department has developed a broad range of measures to accommodate elderly people, in a variety of situations, within family housing estates, attempting to create a spectrum of possible living situations and relationships to family housing. This is exactly the approach which enlightened providers in the United States are seeking to put in place remedially. Perhaps in Hong Kong, the endurance of family connections and respect for the older generation will allow that, in public housing at least, old age does not mean segregation and institutionalisation. A number of strategies used by the Housing Department, outlined in earlier chapters, may be suitable for the private sector:

- 'Mother' blocks of family housing linked to new annex blocks for elderly people

- Conversion of lower floors of tower blocks of smaller units, particularly those close to the core

- New blocks of small self-contained flats for elderly people with family flats also on each floor

- Modular flats arranged in "house" groups of six

- Housing related services on the entrance levels

- Frail elderly care homes built on the podium level above a car park

Models Developed for the Hong Kong Housing Society

In addition, the Hong Kong Housing Society has recently developed financial models such as the purchasing of a life interest in the way that life assurance operates, rather than the purchasing of the full equity with its prohibitive element of land value. There is much to be learned then for the private sector, from looking at the strategies for provision in (semi) public housing. However there are factors which may make a different approach necessary, notably the mobility of home-owners and the effects of house-buying for investment.

Space Standards in Hong Kong Public Housing

The very tight space standards that are fundamental to the provision of housing in Hong Kong cause special difficulties in consideration of housing for elderly people. Since independent housing would mean flats for single people or couples, the outcome is small households. The tiny space allowance per capita which permits in larger household some living space, albeit used by many people, in a one-person or two-person household means barely a sleeping space. This demonstrates the problems highlighted in the US, where regulations for minimum requirements become maximum allowances to curb public spending, to the point that a very unsatisfactory way of life is created; the 'wicked' compromises of design. The kitchen and the bathroom finally defy space reduction because of the equipment they contain; but living/eating/sleeping is collapsed into one space, governed by the requirement to turn a wheelchair round.

Another factor is that for younger people, a 'home' which is barely a place to sleep may be occupied for very little of the waking day, with work, school and perhaps leisure activities occurring outside the home. But how do we envisage elderly people spending their days window shopping?

The Environment Outside the Home

The problem of minimal space standards is exacerbated by the difficulties

elderly people can experience with the external urban environment. In the context of continual urban development, the infrastructure is in a perpetual state of upheaval. Among other things, this means that the pavement is rarely very resolved, but the smallest faults in the surface can present a hazard to elderly people that will lead to broken bones, long periods of recovery and so further restriction. (this is discussed further in Chapter 2)

ACCESSIBILITY: THE HONG KONG AND SINGAPORE EXPERIENCES

A study concerning high density housing and the needs of elderly and handicapped people explored the cost of measures to make the external environment accessible.

The study, "Barrier free design for the physically handicapped", carried out by the Singapore Institute of Architects in Singapore in 1979-80, established that, in the high density context, meeting accessibility requirements at design stage does not normally exceed 1% of total construction costs. This resulted in the adoption of measures to make the urban environment accessible through building ordinances. Similarly these measures are written into Hong Kong building codes. However, the fact that the urban environment is in a perpetual state of redevelopment means that these measures are unlikely to provide free passage for any entire journey as illustrated by the Hong Kong Check Walk organised by Hong Kong Rehabilitation Power in 1997. The most glaring inconsistency was the 16 footbridges encountered with access at one end but not the other! (see Chapter 14)

The radical solution long envisaged for the futuristic city has been to separate services infrastructure from pedestrian routes. To the extent that this can be developed incrementally, it can be seen in Hong Kong, and suggests the podium level for safer access for elderly people. However, unless commitment is made to keeping accessibility open throughout urban change, such a notion could have the converse effect to that which is desirable. Elderly people could be even more segregated and excluded from participation with other groups.

Issues for Hong Kong

* Rising aspirations for space and self containment?

* Working until you die versus a national health insurance?

* Avoiding repeating the American nursing home experience?

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• Who are the carers?

Care in the Community

A study concerned with care in the community in the United States found that as persons become more frail they receive less support from neighbours. Building staff assistance in subsidised housing is minimal because the small staff is confronted by so much support need that they say no to everyone.

"There is still the argument whether the elderly should be maintained in their own homes wherever possible, changing the design of their individual homes ...rather than have whole buildings designed for their express use.....the importance should be noted of not moving people from assisted independent living to a long term dependent environment where they may deteriorate." (Blank, 1992)

"For older people in general and especially for people with problems of mobility, the local environment can directly affect their ability to remain living independently and also their quality of life and life satisfaction. Integrated neighbourhood and macro scale planning for elderly friendly environments is poorly developed in most societies." (see Chapter 2)

"Elderly people need a nice garden they can stroll in ; a lot of friends they can chat with; to have dim sum, play mahjong, tai chi, to sing Chinese opera, to learn arts and crafts, and cooking; a quiet place to watch tv, to read a newspaper, to play chess. Somebody to take care of them in their daily life, give advice on health, to listen to them when they talk about their old days. A safe place, where whenever they need assistance, it will be there." (Pacaud, views expressed at a research seminar, Chinese University of Hong Kong, March 1998)

Living with the Family

A study of the living arrangements of the elderly in Hong Kong explores the existing situation and the preferences for living with the family as is traditional or not. (Chow and Chi, 1990)

"Our findings clearly reveal that we cannot assume that the elderly (in Hong Kong) are all satisfied with their present living arrangements even though they might be living with their children. About 15% were not totally happy with this arrangement. On the other hand about 25% of those living alone or in institutions expressed a desire of living

Table 12.1   Living Arrangements of Elderly Residents in Hong Kong

Living Arrangement	Actual (%)	Preferred (%)
Living alone	9.0	9.8
Living with spouse	11.0	11.7
Living with married children	35.9	34.0
Living with unmarried children	34.7	30.1
Living with relatives/friends	8.5	7.8
Living in hostels & homes	1.0	6.3

Source: Chow and Chi, 1990

together with their families. About 5% were prepared to accept institutional care. When they were incapable of self-care the preference for institutional care increased to around 19%. " (Chow and Chi, 1990, p.18) (Table 12.1)

The study clearly expresses what is needed is *"a housing unit which allows elderly people whether living alone or with other people in the same household, enough space to maintain an independent life, without having to intrude on the lives of others. "* (see Chapter 4) Providing enough space and adequate services for the elderly at home may keep families together, reducing the experience of being a burden, of guilt and of abuse.

MOVING HOME

Sandra Howell in her book *Designing for ageing* clarifies the underlying problem in the American experience with the idea of creating special housing for people to move into when they become "the elderly".

"Ageing is a process of consolidating personal identity. Who am I ? becomes a story told in the presentation of surroundings as well as in remembered events and associations. ....You might seek a new home but with an objective of retaining and containing major aspects of your self-identity and lifestyle. Most older Americans do not move from their owned homes after the age of 55. ....The associations are suggestively strong that the higher the density the less likelihood that an older tenant will leave the building, visit friends on site or engage in activities. " (Howell, 1980, p.2)

This leads to the widespread acceptance of the principle of "ageing in place". The question is, what constitues this place? As mobility becomes

restricted, the relationship between private space and public space changes. If this coincides with a move onto a smaller living space in a purpose built environment, what damaging effect will that have, on quality of life, on social opportunity and on health and well-being?

Howell established from her study that the majority of older people perpetuate their pre-move social patterns that dominantly involve kin in their own or relatives dwellings. This means that dwellings for elderly people must provide enough space to welcome family visitors without compromising dignity, that is, a separate place to sleep and to live and eat.

Space

Some of the views expressed in the seminar held in the Chinese University of Hong Kong on 3 March 1998 as part of this research express well attitudes to ageing and space:

"...the terror of living in a cell that imprisons the mind and spirit in a world of sameness is real and demeaning of humanity".

"People's expectations rise. Since the housing for Senior Citizens has been built by the Housing Department, people have shown dissatisfaction with the degree of sharing, (bathrooms etc in assisted living) and with the amount of space. BUT this must be set against the level of income people have and the rent they wish to pay. Elderly people are among the poorest people. Every square foot counts".

"People in HK may be prepared to accept minimal private space and they may be looking for better quality shared space and social space".

"We may learn from illegal structures where we can see how semi-public space can be inhabited. Temporary structures may show the true spirit of living in Hong Kong".

"More than 75% of the elderly population in HK are not working. This means that they use the space in their home much more intensively than people of working age. This needs to be taken into account when space allocation per person is compared".

"Social space may be better than medicine. Provision for preventative medicine is important".

"Ageing is not a disease!"

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Table 12.2   Provision of Open Space in Major Asian Cities

Asian Cities	sq.m. per person
Hong Kong (urban areas)	1.5
Hong Kong (new towns)	2
Singapore	4
Singapore (proposed)	8
Tokyo (year 2000 target)	6

Open Space

A recent review of public open space points to the pressure of density on the outside environment. A comparison of open space provision in major Asian cities indicates the following (Table 12.2):

The review recommends that the standard be increased to 2 sq.m. per person in urban areas and that the existing active to passive ratio of 2:1 be altered to 3:2. However, it does not recommend a fixed ratio in local open space, which is largely used by children and older people. (Planning Department, Government of the Hong Kong SAR, 1997, p.3)

It can be seen that this increase will have little impact in relation to the gap that leaves Hong Kong far behind Singapore and Tokyo. While the young and fit may escape to the mountains, this lack of open space in urban areas is particularly hard for elderly people.

GOALS IN DESIGNING FOR AGEING IN HONG KONG

It has been fairly commonly observed that numerous paradoxes characterize later life. Ageing can be seen as a source of wisdom and suffering, of spiritual growth and physical decline, of honour and vulnerability. Most cultures maintain ideals of ageing and old age which include abundance and physical ease. However, other cultures have believed that ageing should be accepted and that it should be in part a time of preparation for death. What are the important goals to achieve an environment where the meaning of old age will be manifested, here in Hong Kong at the turn of the century?

Habitability

According to Howell (1980), if a person has lived in the same house for many years, their relationships to that space will have become clearly habituated. The expectations of how the person and his or her living environment should be shaped, in complement, will be well established. The rules for perceived habitability will have been laid down. Indeed, an awareness and responsiveness to patterns of habitability can lead to design for a new situation that is recognisable and allows continuity of experience with the past.

Integration

A range of assisted independent living options to extend functional independence in an environment of choice can allow people to age in a place with which they are familiar and content. However, ageing-in place solutions may be prejudiced because of the wider environmental conditions in which elderly people find themselves. For example, fear of falls makes people stay in their own homes, losing interaction. As Phillips asks in Chapter 2, can local "elderly friendly" planning actually be achieved?

Adaptability

Older people show enormous variability in interests, capacities and competences. Part of the rationale for housing programs directed toward this population is to address the need for greater alternatives as it is represented in this variability. There is, for example, a wide variety of needs encompassed by the term "disability". We need to avoid reducing the possibilities for housing for elderly people to a limited set of types, but rather increase the range of possibility to match the diversity in the lives of people over 60. The goal of architects and designers should be to provide enough space and to make it adaptable for the changes that accompany ageing, so that moving is not forced by increasing physical needs.

More Goals Include ...

• How to create social space?

• How to bring to elderly people the things that they need, to be able to continue living independently?

• How to provide integrated services; for instance medical care?

• How to make the connection between the private and the social space?

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- How to make suitable homes by conversion in existing areas?

- How to avoid segregation by age?

- How to allow disorganised space?

- How to maintain elderly people's mobility; to fly about the world, or just to use public transport to be able to go beyond their own immediate environment?

- How can elderly people keep their connection, to younger people, to share their stories about their earlier lives, to know their valuable contribution to the society?

- How to enhance elderly people's ability to continue working?

- "Living independently but not going it alone!"

Options to Explore

Options include a range of plan types that represent benchmarks in a spectrum of provision to accommodate the wide-ranging requirements of people from the age of 60-65 to death in every stage of ageing, from active and working to frail and bedridden. These are not exclusive or comprehensive and no attempt should be made to limit provision to a small number of types. Rather, they serve to explore possibilities at three levels of requirement for assistance in the gradual and changing process of ageing. The three levels of provision identified are: *independent living, assisted living* and *frail elderly care.*

APPLICATION TO CITY ONE SHATIN

The second stage of the research will consider opportunities to integrate these types into an existing estate, City One Shatin. Opportunities to be explored include:

- Conversion of small unit blocks for small scale assisted care or board and care arrangements.

- Conversion of units within blocks also containing family units.

- Identification of sites with under-used open space at podium level for a hypothetical location for a special building, not more than 24m high.

- A special building to accommodate frail elderly care, assisted living and common facilities for use by residents within the assisted care

accommodation as well as elderly people in the rest of the estate who live independently.

- Common facilities and entrance at the podium level, to activate the podium space, which less intensely used than is desirable. This may also provide safer access for elderly people.

- Common facilities such as a hydro-therapy pool, computer services, home working services, restaurants, health services, bird garden, tea house, arts and crafts studios, study, tai chi room, gardens, mahjong, guest rooms.

To visualise the level of provision that would be appropriate for an estate such as City One Shatin, projections have been made by deduction from actual population statistics and research conducted in Hong Kong on living arrangements and preferences of elderly people.

Deduction of Hypothetical Projections for Elderly Population - City One Shatin

The aims of this hypothetical projection are to give a picture of a balanced population of older age groups; to reflect the needs of elderly people in relation to their physical condition and, to reflect the preferences of the elderly people in Hong Kong. On the basis of the research into case studies, for the purposes of this study we have defined three the following categories of housing provision that are proposed for elderly people in high density private housing estates in Hong Kong.

DEFINITION OF HOUSING FOR ELDERLY PEOPLE IN HONG KONG

Independent Living: with assistance available means help is brought in with heavy housework, in case of a fall or emergency; in case of confusion; temporarily during recovery from illness or accident; it can include space to work at home.

Residential Care/Assisted Living: means meals are provided; living rooms are shared, it can be specialised for those with confusion.

Frail Elderly Care: means daily assisted personal care; assistance with moving about; meals are provided; living rooms are shared; it can be specialised for those with confusion.

The hypothetical projections are made for the numbers in each of these categories for City One Shatin as an example of a typical private estate of about 10,000 flats.

Available research for making these projections comes from the sources noted in Box I and Appendix 12.1.

PROJECTIONS

Population of City One Shatin (1996): **27,630** people

Population over 65 years old will peak in the year 2036 at about 20%, therefore a balanced population for City One Shatin would be a maximum number over the age of 65 of **5,526** people.

At present across Hong Kong as a whole, about 60% of elderly people live with sons and daughters; 40% live with spouse, alone, with others, or in institutions. For the purpose of this study an assumption must be made about the level of interest in living independently but within walking distance of the family, if this option was readily available. Taking a conservative assumption, we may assume some shift in preferences towards independent living. Then it may be said, for the purpose of this study only, that 45% of this age group would live independently; totalling **2,500** people.

Of these, referring to current patterns, 15% might be expected to live alone and independently (825 people); 18% would live with their spouse (2 x 495 couples); 12% would live with friend or relative(2 x 330 sharing). This would give **1,650** flats.

Of this group choosing to live independently, 15% could be provided with a study to reflect the desire to continue working as ageing means travel to work becomes challenging; new technology can enable home working. Then we may propose as summarised in Table 12.3.

Table 12.3   Proposed Number of Accommodation Units for Elderly People Living Indepentently

No. of People	No. of Flats	Types of Flats
825 people	700	single flats adaptable for wheelchair
	125	single with study 15% with workrooms
990 couples	420	double flats
	75	double with study
660 sharing	280	2-bedroom flats
	50	2-bedroom with study

Note: Please refer to the BOX I Case Study

BOX I   CASE STUDY -- HYPOTHETICAL PROGRAMME
         FOR CITY ONE

The outcome of the deduction for a projected elderly population for City One Shatin is an hypothetical programme for the number and type of accommodation for elderly people. Subject to the provisos noted, the following accommodation would be needed:

Independent Living   700 single flats adaptable for wheelchair
                           125 single with study 15% with workrooms
                           420 double flats
                           75 double with study
                           280 2 bedroom flats
                           50 2 bedroom with study

Residential Care/Assisted Living 28 homes each for 12 people
                                      150 single rooms
                                      50 single w/ch / double rooms
                                      130 twin rooms

Assisted Living for Dementia   35 homes each for 8 people
                                      130 single rooms
                                      40 single w/ch/ double rooms
                                      110 twin rooms

Frail Elderly Care   3 homes for 36 people
                                      22 single rooms
                                      14 double rooms

**Family flats extended
to accommodate elderly parents**   elderly couples 440 flats
                                   single elderly people 1440 flats

BOX I CASE STUDY -- HYPOTHETICAL PROGRAMME FOR CITY ONE (continued)

Imagining Integrated Housing for Elderly at City One Shatin

Figure 1a
Above the podium, as it exists now, trees giving shade are growing in island planters in an expanse of hard paving, but there is poor consideration of detailed definition of the space. People hurry across the wide expanses of hard areas open to the sun and rain, to escape to the indoors for shelter and air-conditioning. There are few edges, corners or places to rest under shelter. The island seating shown here is outward facing, not conducive to gathering and conservation.
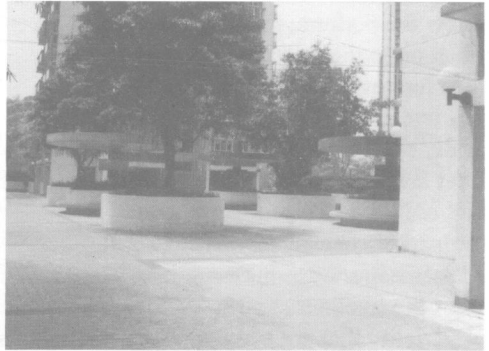
Figure 1b
The vignette shows upper levels of independent living housing forming an occupied edge to the podium. Planting and seating are arranged to create shaded, still spaces to gather and rest, to one side of a more linear space. The space is given identity by the elevation of the housing. Although the open space is reduced, it is more habitable because it provides more edges. The housing has a fairly closed aspect onto the podium and would be accessed from an internal courtyard.

BOX I   CASE STUDY -- HYPOTHETICAL PROGRAMME
FOR CITY ONE (continued)

Imagining Integrated Housing for Elderly at City One Shatin
(continued)

Figure 2a
Below the podium, the existing
elevation to the street is modelled
as an interesting geometric form
with underused carparking
inside, over the wet market. At
street level the elevation is blank,
used only to extract air from the
wet market. The narrow and
faceless entrance to the market
belies the liveliness and
conviviality that are truly
characterises.

Figure 2b
The vignette shows housing for
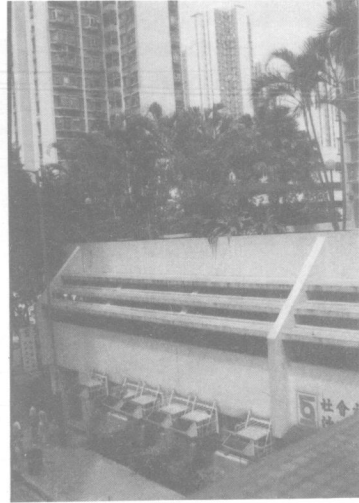the elderly stepping down from
the podium forming an inhabited
edge in place of underused
carparking. Projecting windows
and balconies allow a connection
to the life of the street. The
florists stalls face out to the street
bringing it back to life as a place
to encounter people. Connections
are made between the podium
level, the housing, the street and
activities of the market.
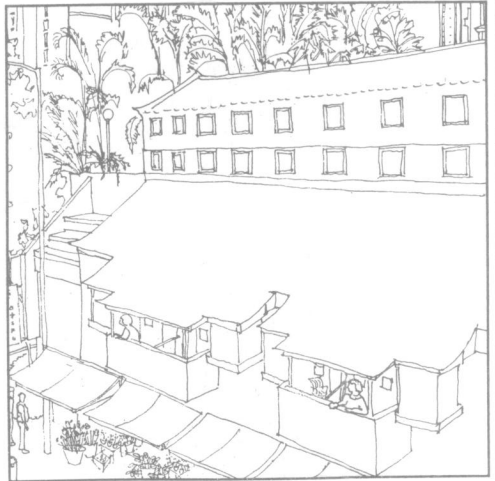
Residential Care/Assisted Living

With reference to expressed preferences in Hong Kong, 6% of this age group would choose residential care, some 330 residents. Accommodation requirements would be:

28 homes each for 12 people

60% in 150 single rooms (50 single w/ch/ double rooms)

40% in 130 twin rooms

According to Leung's study, about 11% of this age group might have cognitive difficulties. If, similarly, 45% of these elderly people were to live away from their family, then 5% would need residential care catering for dementia (**280** residents). This would require 35 homes each for 8 people; 60% in 130 single rooms; 40 single w/ch / double rooms; 40% in 110 twin rooms.

Frail Elderly Care

Also following Leung's study, some 6% of people might have difficulty with getting in and out of bed, which indicates the level of frail elderly people; however better information would be necessary to estimate realistic levels of provision. Also, we should assume that some frail elderly would still prefer to live with their family, and obtain the services they need there. In the United States, 1.1% of the elderly aged 65-84 are in nursing homes rising to 22% of those aged over 85. In Hong Kong, those aged over 85 will represent about one quarter of all those over 65. There is also the possibility that fewer frail elderly places may be needed here than in the United States, because studies in Taiwan show a steeper rate of decline with less long-term chronic illness. However this may be due to health factors which might change to being closer to the American picture as lifestyles, diet and other factors converge.

We may therefore speculate for purpose of this study only that some 2% of the population over 65 require frail elderly care. This means a total of **110** people (2% of 5,526). They would require 3 homes for 36 people, with 22 single rooms and 14 double rooms. This can be compared with the current standard for places in care and attention homes which is 17 places per 1,000 of the elderly population. This gives for City One Shatin (at its peak level for over-65 population in the year 2036), 1.7% frail elderly care places for the projected population (94 people).

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Elderly People Living with Their Family

The assumption underpinning all the above estimates is that 58% of the elderly population might choose to live independently from their family if they could live close-by, with suitable services and environment. This would mean that 42% were living with their family. Some attention is also needed to family housing with suitable space for elderly relatives. Projections for elderly people living with offspring give **2,320** people, of whom 38% might be as couples (882 people) and 62% as singletons (1,438 people).

The requisite number of family flats accommodating elderly parents would be about 440 flats for elderly couples and 1,440 flats for single elderly people. Consideration should also be given to developing housetypes for families who have older parents living with them.

A Cautionary Note

Sandra Howell (1980), in *Designing for Ageing*, advises caution in assuming increase in market demand for private sector housing for the elderly in proportion to projections for increases in the elderly population. Research in 1970 showed that fewer than 20% of 65-70 year olds had moved home in the last 5 years. While mobility is high in Hong Kong, we must allow for the fact that moving at this age may be perceived as undesirable. There is a notable phenomenon of sharp deterioration in the condition of elderly people on moving home when forced by failing capacities.

Architectural Proposals

The next phase of research is to produce architectural ideas on the basis of these definitions of type and projections of numbers. Further research is needed to prepare a realistic proposal; such as post occupancy evaluation in an Asian context, and a basis for assessing the desire to live with the family or independently. The level of people who would choose frail elderly care needs to be assessed with better information than has been obtained within the limits of this study.

CONCLUSION

"Older people show enormous variability in interests, capacities and competences. Part of the rationale for housing programs directed toward this population is to address the need for greater alternatives as it is represented in this variability." (Howell, 1980, p.2)

There is some question as to whether designing for a group defined by age is positive at all. This approach is related to the ideas of zoning that separates functions within the city. While this has been historically literally life-saving, it was an approach to redress the very bad experience of the unconsidered urbanisation of the West. Where such interests have not been pursued so ruthlessly, the value of the over-layering of activity within the city can be appreciated as a richness that creates possibilities such as access and interaction of people at different stages in their lives. Hong Kong presents such possibilities if design can be responsive enough to the many ways that a city is lived simultaneously. This means listening to the interests of people in all stages and states of life, rather than only those which are economically dominant, and allowing these many layers of "function" to be expressed, accommodated and integrated.

It is in this vein that the design exercise will be approached, not as an attempt to isolate and define a special functional type that meets an analysis of norms. Rather it represents an attempt to knit back into the urban fabric of the private estate some layers of living that have been excluded. The illustration (Box I) show how this relation can be remade in an estate like City One Shatin. The Housing Department with its comprehensive brief has gone a long way in this knitting; in the limited scope of this study we can hope to suggest some model approaches for private estates.

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Appendix 12.1   Sources of Statistics Referred

- **Population of City One Shatin is 27,630** (from 1996 by-census), TPU756, street block 19, report from Census and Statistics Department.

- **Working Group on Population Distribution** - population distribution by   broad housing type based on 1996 Population By-census results.

- **Y.C. Cheng,** Assistant Director, Applications and Home Ownership Division, Housing Department - paper given at the conference "Planning a better environment for elderly people in Hong Kong" on 16 January 1998 at the University of Hong Kong. 2.3m people, 38% of the population of Hong Kong live in public housing.

- **The latest general household survey** shows that the elderly population aged 60 and above amounts to 900,000 people representing 14% of the total population of Hong Kong. Of these, 44% are living in public rental housing, making up 17% of the public housing population. An estimated 27,000 elderly people living in the private sector are eligible for public housing. At present there is a waiting list of 14,700 elderly people. Of these about 10,500 are single and 4,200 are couples or friends.

- **Nelson Chow,** Department of Social Work and Social Administration, University of Hong Kong.

  4% of elderly in Hong Kong live in various kinds of institution

  24% live alone or with another unrelated person

  72% live with other family members, 1/3 of these with their spouse

- **A Study of the Living Arrangements of the Elderly in Hong Kong, June1990**

  These findings clearly reveal that we cannot assume that the elderly are all satisfied with their present living arrangements even though they might be living with their children. About 15% were not totally happy with this arrangement. On the other hand, about 25% of those living alone or in institutions expressed a desire to live together with

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their families. About 5% were prepared to accept institutional care. When they were incapable of self-care the preference for institutional care increased to around 19%.

	actual	preferred
living alone	9.0%	9.8%
living with spouse	11.0%	11.7%
living with married children	35.9%	34.0%
living with unmarried children	34.7%	30.1%
living with relatives/friends	8.5%	7.8%
living hostels and homes	1.0%	6.3%

- **Edward Leung,** Department of Medicine and Geriatrics, United Christian Hospital and President, Hong Kong Association of Gerontology:

  Population over 65 will peak @19.5% in 2036

  There are more older women than men

  65% of the pop over 60 are married

  13.8% of 65+ are working (1991, declining with time) about 2:1 men:women

  37% have difficulty with heavy housework

  17% have difficulty with stairs

  fewer than 8% have other difficulty with independent living

  11% have cognitive difficulty

- **For the current Hong Kong Planning Standards and Guidelines**, readers may refer to Chapter 7 by Lisa Cheng . Lisa Cheng also obtained the total population of City One Shatin.

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Service Standards in Residential Services for Elderly People in Hong Kong

Simon Pak-Ho LI

INTRODUCTION

At present, residential services for elderly people in Hong Kong consist of sheltered housing for the elderly, hostels, homes, care and attention homes and nursing homes. These are mainly provided by NGOs with government subvention and by private operators on a commercial basis. There is on the whole some standards but lack of monitoring and evaluation mechanisms to assess whether the services provided are cost effective, efficient, value for money and meeting client's expectations.

THE EXISTING SITUATION

For the subvented homes and residential facilities there are space standards (as spelt out in the schedule of accommodation), unit costs, etc., set out in the guidelines by government for NGOs to follow. In the case of private homes, there are licensing requirements as described in the ensuring paragraphs as basic standards to work on. Over the years, through the concerted effort of the SWD and NGOs, some standards have been developed and reviewed from time to time taking into consideration the changing environment and needs.

However, there is lack of sufficient and continuous research to reflect the changes in clients' aspirations and efficient deployment of available resources. One area in which individual NGOs have begun to do this is in carrying out on their own initiative business process re-engineering or

management enhancement programmes so that resources can be redeployed to reflect changing circumstances of the community and to satisfy client's expectations. So far some research and studies have been carried out revealing that some areas are in need of improvement while others may need to be trimmed or scaled down because they have become extravagant or excessive. There is also a clear necessity to carry out surveys and work with focus groups to find out the satisfaction levels of clients receiving personal and care services, social and recreational activities, etc., with a view to improved service delivery. There should also be sufficient channels of communication between frontline staff, supervisors and policy makers so that a total approach for service improvement can be achieved.

THE LICENCING REQUIREMENTS FOR PRIVATE HOMES

Under the Residential Care Homes (Elderly Persons) Ordinance (Ordinance No. 90 of 1994) and its subsidiary Regulations, operators of private residential care home for the elderly are required to register their homes according to the stipulated requirements relating to design, structural and fire safety, space and staffing standards after 1 April 1995. Since April 1995, the SWD also issues the Code of Practice for Residential Care Homes (Elderly Persons) for operators to follow. Basically, the requirements and code of practice aim at ensuring that the homes are safe and free from hazards, structurally sound, having a minimum space standard of not less than $6.5m^2$ per person and being run by a minimum team of staff consisting of nurses, health and personal care workers and other supporting staff. Those homes without licences are given certificates of exemption until various improvements are carried out to attain to the required standards.

To date, there has been very little control on operations of private home although there are legislation and licensing requirements for operators to follow. So far, out of about 418 homes with a capacity for 22,043 beds, fewer than 10% (33) are licensed. The majority of the operators have shown very little intention of complying with and operating according to rules and guidelines. Worse still, new homes continue to open without licences. The main reason for this is because most private homes are operated in rented premises with relatively short lease terms of about two to three years. Therefore, the operators would not put in sufficient and reasonable resources either in fitting out the premises to satisfy the required standards or to comply with the stringent building and fire regulations. If their tenancies are terminated or not be renewed, they will not be able to recover their investment. Understandably, most of the

private homes are operated in premises not very suitable for running elderly homes of larger scale without major alterations because of structural constraints. Sometimes, in seeking more suitable premises in large private housing estates, there are provisions or constraints in the deed of mutual convenant prohibiting the setting up of any sort of institutional care homes. In a few cases, there is also discrimination from residents' organizations against the setting up of these homes.

THE OVERSEAS EXPERIENCE

In the United Kingdom, housing for older people is linked with care provision of various kinds. The private sector, the public sector and voluntary sector all work across the spectrum of provision and different government departments and agencies are involved in different forms of provision.

For elderly home owners there are different forms of "care and repair" schemes available from local authorities or voluntary agencies to help spend improvement grants on necessary adaptation works so as to allow elderly people to stay in their own homes longer.

In terms of special housing provision, various categories were identified about 25 years ago. Increasingly, these categories have become somewhat obsolete as the requirements for different forms of housing and different forms of care home become more individually responsive, i.e. more to reflect client's aspiration. The original categorization ranges from Category 1of basically small self-contained flats with warden service or call systems for elderly people of independent living, to Category 2 homes which are groups of homes for people who are slightly more dependent. The homes are built around heated indoor corridors with warden, a call system, with common rooms and small meeting rooms. There are also facilities such as lifts for easy access by disabled persons. Recently built group homes for the elderly are becoming more popular because they provide extra facilities for higher dependency and care. Over the years, domicilary care and agency services have been expanding very fast because of the increase in the ageing population. For the more dependent elderly, residential care homes are established subject to regulations and control by local authorities, if their capacity is more than 6 beds. In the past, local authorities have taken up the role of providing residential care homes but now the private sector has come on to fill the gap as the government both at national and local levels has decided to act as a purchaser of services instead of a provider of services. As in countries like the United States, with well developed medical services, the trend for the final stage of care for elderly

people tends to be nursing homes for patients with advanced senility, Alzheimer's Disease or physical problems. This together with other forms of assisted living will eventually replace most of the long-stay geriatric hospital beds which have proved to be very expensive and sometimes thought to be over provisioned or undesirable. The overall approach in the provision of elderly service in the Western world is shifting from the state to the private and voluntary sector, not only because by so doing there will be more efficient use of resources, but also to reflect the wish of the people to remain independent as long as possible and be treated individually rather than to receive a standard package of housing and care.

With regard to monitoring the service standards for residential care service, both United Kingdom and United States are relying fairly heavily on voluntary organizations such as Aged Concern (AC), American Association of Retired Persons (AARP), Continuing Care Accreditation Commission (CCAC) in addition to government departments and agencies. The United Kingdom does also rely on inspection teams and formal standards, however (Phillips, 1996).

FUTURE OUTLOOK

So far, most, if not all, residential services for elderly people in Hong Kong are very institutionalized. They are more like hospital wards than homes. As a result, many of the service standards are not user-friendly and few reflect clients' aspirations. It is obvious that any elaborate changes would have an impact on the use of resources. There should be more study and research carried out to set space and design standards as well as various service standards in accordance with client's expectations, community needs and available resources.

There are serious concerns in the community about the operation of private homes. Unless the authorities are willing to exercise strict supervision and control, unlicensed homes will continue to exist and the community at large and elderly people in particular will face unnecessary risks if fires and other emergencies occur in these homes.

The Government recognises the need to have private homes to serve the particular elderly sector not eligible for subvented homes. It may therefore have to consider ways and means to assist the private operators in securing longer leases which is a prerequisite for establishing good standard licensed homes. This could be done through the inclusion of suitable clauses in the land lease for private developments. As a further

step towards the modern concept of government being the purchaser instead of provider of the service, there is the necessity to establish very clear policy directives and incentives to encourage NGOs and the private sector to develop efficient and effective services to satisfy the elderly customers.

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ACCESSIBILITY AND RECREATION FOR ELDERLY PEOPLE

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Accessibility for Elderly People

Charles LEUNG

Hong Kong is a place where maximization of profit and the minimization of costs are the principal considerations in the development of many estates and the provision of public transport services. Many buildings and public transport facilities are only designed with the majority of the population in mind. This mind set poses difficulty and creates barriers for the minorities in the population, in particular, people with a disability including elderly people with disabilities.

It is understandable that many elderly people have some degree of physical limitation or difficulty in mobility. As of 1 July 1994, for example, about 31,000 of Disability Allowance recipients were over 60 years old (Hong Kong Government, 1994). Therefore, without proper access facilities, some elderly people may become home-bound and unable fully to participate in the community. The access problems faced by persons with a disability also greatly affect the quality of life of many elderly people. As stated in the *Design Manual : Barrier Free Access 1997* published by the Hong Kong Government's Building Department, barrier-free design requirements will help considerably towards greater independence of not only persons with a disability, but also of many elderly people and pregnant women.

ACCESSIBILITY - THE INTERNATIONAL SCENE

According to the Declaration of the Rights of Disabled Persons (United Nations General Assembly Resolution 3447, adopted 9 December 1975), disabled persons have the inherent right to respect for their human dignity.

Disabled persons, whatever the origin, nature and seriousness of their handicaps and disabilities, have the same fundamental rights as their fellow-citizens of the same age, which implies first and foremost the right to enjoy a decent life, as normal and full as possible (Article 3). The Declaration also states that disabled persons are entitled to the measures designed to enable them to become as self-reliant as possible (Article 5). Furthermore, disabled persons are entitled to have their special needs taken into consideration at all stages of economic and social planning (Article 8). It is thus reasonable that government and public organizations as well as private sectors should provide proper access to persons with a disability.

The United Nations General Assembly later proclaimed 1981 as the International Year of Disabled Persons (IYDP) to encourage all governments to accept basic responsibility for the rehabilitation of disabled persons. After the adoption of the World Programme of Action Concerning Disabled Persons in 1982, the United Nations proclaimed 1983-92 as the United Nations Decade of Disabled Persons. The objectives of the Programme were to promote effective measures for achieving the goals of full participation and equalization of opportunities. The United Nations World Programme of Action called for member states to make the physical environment accessible to all. Every government should adopt a policy ensuring disabled persons' access to all new public buildings, housing and public transport systems. Measures should also be taken to facilitate disabled persons' access to existing building and facilities, especially by taking advantage of renovation. To sustain the momentum generated by the United Nations Decade of Disabled Persons, the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) declared the period from 1993-2002 as the Asian and Pacific Decade for Disabled Persons. Accessibility, once again, becomes an item on the Agenda for Action for the Asian and Pacific Decade of Disabled Persons. Member states, including Hong Kong as the SAR is an associate member of ESCAP and one of the signatories of the resolution proclaiming this new decade, should take the following major actions to improve accessibility:

- Review the planned and existing built environment and practices employed in its extension and maintenance, with a view to the development of measures for improving its accessibility;

- Development of barrier-free design codes to cover new construction as well as renovation and expansion (including office and residential

buildings, public facilities, areas around buildings, roads and transport infrastructure);

•   Amendment of existing codes to include accessibility features at the same level of importance as fire safety features;

•   Introduction of accessibility concerns into programmes for the training of professionals, technicians engaged in the construction and maintenance of buildings;

•   Development and implementation of guidelines for electronic accessibility.

In spite of the worthy resolutions and varying degrees of progress in making environments more accessible for people with disabilities, many problems remain. Some of the major factors causing problems in urban environments are discussed by Imrie (1996). Golledge and Stimpson (1997) review many practical matters such as the physical barriers for disabled people, the human interaction barriers and the disability legislative acts in a number of countries.

THE INTERNATIONAL DISABILITY MOVEMENT

There are several international disabled persons organizations advocating the rights of disabled persons at the international level. These include organizations such as the World Blind Union (WBU), the World Federation of the Deaf (WFD), the International League of Societies for Persons with Mental Handicap (ILSPMH), the Rehabilitation International (RI), the Disabled Peoples' International (DPI) and the Rehabilitation Action Network for Asia and the Pacific (RANAP).

The establishment of the Regional NGO Network (RNN) further enhances the collaboration and coordination among NGOs. The RNN was established for promotion of the Asian and Pacific Decade of Disabled Persons by the resolution of Campaign '93 of the Asian and Pacific Decade of Disabled Persons Regional NGO Conference in Okinawa, Japan. The conference was attended by 1,300 persons of 16 countries and the above international disabled persons organizations. RNN members are national and international organizations of and for people with disabilities. As of May 1995, there were 13 national NGO members and 8 international NGO members.

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HONG KONG: LOCAL LEGAL PROVISIONS ON ACCESSIBILITY

In response to the IYDP and the United Nations Decade of Disabled Persons, the Hong Kong government introduced the *Design Manual: Access for the Disabled 1984*. Since then, the requirements for providing proper access and facilities for persons with a disability in new public buildings have become part of government policy. The Design Manual was updated and renamed the *Design Manual: Barrier Free Access* in 1997. In addition, the enactment of the Disability Discrimination Ordinance in August 1995 and the establishment of the Equal Opportunities Commission further empower persons with a disability to demand for the equal right on accessibility.

The Local Disability Movement

There are many self-help organizations in Hong Kong related to disability, the oldest of which was formed in 1964 by a group of visually impaired persons. These organizations promote and protect the rights of disabled persons and undertake public education programs. Disabled self-help groups and organizations have for a long time been concerned very much with the issue of accessibility as it is one of the major factors related to equal opportunity and participation. In response to the pressure and requests from disabled groups, an Access and Transport Sub-committee has been established since October 1977, with disabled representatives, under the Rehabilitation Advisory Committee (formerly called the Rehabilitation Development Coordinating Committee). It was also in 1977 when the first White Paper "Integrating the Disabled into the Community: A United Effort" was published. Nevertheless, the RAC is only an advisory committee and can do relatively little to improve the accessibility of existing buildings. Therefore, accessibility remains far below satisfactory levels and there is much need of advocacy.

THE HONG KONG CHECK WALKS

Hong Kong Rehabilitation Power, a charity self-help organization of persons with a disability, organized the first Hong Kong Check Walk on 10 November 1996. The Hong Kong Check Walk was a large-scale survey on the accessibility of the public areas and community in Hong Kong and entailed a public education program. After the Hong Kong Check Walk '96, a comprehensive report was sent to many concerned government

departments and organizations for reference. In November 1997, the Hong Kong Rehabilitation Power organized the Hong Kong Check Walk 1997.

The starting ceremony of the Hong Kong Check Walk 1997 was held at the sea front in front of the Hong Kong Convention and Exhibition Centre. Over 600 participants, comprising volunteers from 20 voluntary agencies, public and private organizations, and 60 persons with a disability, took part in the survey from 11:30 a.m. to 5:00 p.m. on that day. They were divided into 29 teams to visit designated routes to check the accessibility of buildings and facilities. The routes were designed to cover the major business areas in Central, Wan Chai, Sheung Wan, Causeway Bay, Quarry Bay, Southern District, the Peak, Tsim Sha Tsui, Mong Kok, Yaumatei, Sham Shui Po, Hung Hom, Kowloon City, Tsuen Wan, Kwai Chung, Tuen Mun, Shatin and Tai Po.

Major Findings

In the Check Walks, the Check Teams assessed 146 buildings, over 200 road junctions and 31 elevated walkway, footbridge and subway systems. A number of important features were found.

Drop Kerbs

Among the checked road junctions, 81 crossings were found which lacked drop kerbs. This creates great difficulties and dangers for elderly persons who are using walking aids or wheelchairs. Under government current policy, dropped kerbs are only provided at new at-grade crossings. Existing crossings will only be modified during road maintenance and reconstruction. Unfortunately, for developed areas such as Central, Wan Chai, Causeway and Tsim Sha Tsui, the chances for road maintenance and reconstruction are limited which impedes the provision of dropped kerb in these populous and busy areas.

Elevated Walkways, Footbridges and Subway Systems

Of the 31 elevated walkways, footbridges and subway systems checked, only nine were found to be equipped with proper access ramps or elevators at both ends. Most of the remaining systems were only provided with stairs. It is quite interesting to find that nine footbridges were either provided with access ramps or lifts at the one end but, at the other end, were provided with stairs only! These included important crossings such as the footbridges across Connaught Road, between Shun Tak Centre and Vicwood Plaza and footbridge across Chatham Road South between Hong

Kong Science Museum and Granville Road, Tsim Sha Tsui Centre and the Royal Garden Hotel.

As elderly persons with walking difficulties often cannot use stairs, their accessibility has therefore been seriously affected. Their only feasible alternative is to use at-grade crossings. However, as most of these elevated walkways, footbridge and subway systems are constructed to replace the at-grade crossings to relieve traffic congestion, and at-grade crossings are not usually available within reasonable walking distance. In other words, elderly persons are forced to jay-walk across the road, which put their lives at risk as well as those of other travellers.

Buildings and Facilities

Entrances

According to the "Design Manual", proper access to buildings should be provided for the public and persons with a disability. Such access should be free from steps, kerbs other than dropped kerbs, steep ramps or other forms of barrier. However, among the 146 buildings checked, 90 had steps, high stairs and escalators at the main entrances. Nevertheless, only 32 had provided alternative accessible entrances. Moreover, four of the special entrances were locked. As a result, elderly people with mobility difficulties will inevitably find it very difficult to access such buildings.

Signs

Without clear signs to show the locations within and/or outside a building, persons with a disability cannot easily find and use the facilities provided for them. With regard to the 32 alternative accessible entrances provided for persons with a disability, only 16 had clear signs. The lack of proper signs poses additional access difficulties for elderly people.

Disabled Wash Rooms/Toilets

A total of 76 disabled wash rooms/toilets were found. However, the conditions of most of the disabled wash rooms/toilets were not satisfactory, as indicated in Table 14.1.

The lack of proper disabled wash rooms and toilets in good condition and with proper facilities poses additional inconvenience and risk to elderly people.

Table 14.1   Conditions of the Disabled Wash Rooms/Toilets

Conditions	No. of Wash Rooms/Toilets
Used as storerooms	17
Poor maintenance	9
Not provided with handrails	56
Locked	20
Wet floor	11
Dim light	15
Without emergency call bell	72

CONCLUSION AND RECOMMENDATIONS

It is becoming increasingly obvious that a far more constructive approach is to view disability as a relationship between an individual and his or her environment. It is largely the environment which determines the effects of an impairment on a person's daily life. Societies by large still cater only for people who are in full possession of all their physical and mental faculties. Societies have to learn to respond adequately to the needs of all the people, including persons with a disability. Societies have an obligation to make their general physical environment, their social and health services, their educational and work opportunities, as well as their cultural and social life, including sports, totally accessible to disabled persons (Plan of Action for the International Year of Disabled Persons United Nations General Assembly Resolution A/RES/34/158 adopted 30 January 1980).

There is still plenty of room for improvement with regard to accessibility issues, in Hong Kong as in most other countries. The Government, private property developers and management companies should make more effort to improve the existing facilities and ensure the proper use of disabled facilities. Public education on the right of access and a barrier-free society is also required to change the attitudes and mind set of the public. Rehab Power and other organizations are happy to see that more private property developers are beginning to take initiatives to improve the situation. For example, the Hong Kong Check Walk 1997 was fully sponsored by the Sun Hung Kei Property Group and staff of the company's two major property management companies also joined the Check Team as volunteers. With greater conscious effort from Government, property

developers, management companies and NGOs, Hong Kong can become a barrier-free society and better home for everyone.

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Provision of Recreation Facilities and Programmes by the Provisional Urban Council for Elderly People in the Urban Areas

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INTRODUCTION

This chapter outlines the types of existing leisure facilities and those under planning for use by elderly people at Provisional Urban Council recreation venues. It is now widely recognised that Hong Kong has an aging population and, as a major provider for public recreation and sports facilities in the urban area, the Provisional Urban Council has provided very diversified types of recreational facilities to meet the needs and aspirations of the general public. The Council's facilities are designed for the participation of all ages including the elderly. To achieve this, the age distribution of the catchment population of each recreational project is taken into consideration during the planning stage. With the increasing demands and expectations from the older population, the Council is making its utmost effort to provide the facilities both quantitatively and qualitatively to serve this sector of population. In particular, special attention is being paid to the design details to make these recreation facilities more convenient for elderly people to use, such as larger signage, non-slip flooring, clearly marked steps, hand rails and more comfortable park seating in popular parks where older people congregate. In order to encourage elderly people (aged over 60) to use Council's recreational facilities and participate in programmes, they only pay a half-price concessionary rate where a fee is involved.

EXISTING LEISURE FACILITIES FOR ELDERLY PEOPLE

The chapter now gives details of the types of facilities currently being provided. Most of the existing recreational venues, including 813 parks and gardens, are provided with facilities for the enjoyment of older persons. These facilities include:

Tai Chi Areas

The Council provided 432 formal Tai Chi classes in 1996/97 in the urban area. All these classes are held at Council's venues both indoors and outdoors and participants pay a small fee. Participants are predominately between 40 to 50 age range but the age distribution is gradually increasing, with more over 50 years joining the programme because it allows the person to practise at a slow pace and does not require a high degrees of skill. There were 46,194 participants in the Council's programme in 1996/97. The bulk of independent Tai Chi practitioners are however either individuals, in which case they are usually below forty and have a back ground in Chinese martial arts, or are formed in social groups (aged over 40) who use it as a medium to stay fit whiles socialising with friends. This independent category can be found all over Hong Kong at all different times wherever there is sufficient space for them to practise. The Council has recognised the demand for this activity and has provided in some parks such as Hong Kong Park, dedicated Tai Chi gardens. The Council has also taken account of this requirement when designing new parks by making sure large open spaces with suitable surfaces are provided for Tai Chi.

Chinese Chess

Similar to its Western counterparts, the Chinese form of chess is very popular with elderly people. It is common for elderly people to like to congregate with their peer groups and playing chess allows for this. The initial design of chess tables was provided with only two seats with little shade and proved to be very unpopular. To rectify this situation, the trend now is to provide clusters of chess tables in pavilions so that casual spectators can watch their friends play. Although this activity is more mental than physically demanding, it is, nevertheless, played very seriously.

Lawns

The lawn areas have proved to be very popular and people like to walk and relax on this type of soft surface. The most popular is the central lawn in Victoria Park and the Council has plans to provide more lawn areas in

new parks and gardens. Elderly people in particular like this surface as it allows them to exercise. Apart from this activity, the elderly people also like to play gateball on the lawns. Gateball is a very popular game with the older players because the rules are simple and it can be played by a minimum of two people. Simple equipment like a mallet is used to hit a ball through a small metal hoop to score. These common use lawn areas are used for potted sports as well by the elderly and for impromptu games which they organise themselves.

Pet Birds

The keeping of pet birds is a traditional hobby pursued by male of all age groups. Elderly people in particular find this pastime enjoyable and numerous pet bird owners take their birds for 'walks' in the parks. This activity is not only very relaxing for the individual but provides a convenient point for making new acquaintances. Although it is an informal activity in most parks, it has been formalised with the building of Yuen Po Street Bird Garden. In this garden, not only can the visitor display his bird but also visit the many bird shops nearby.

Park Furniture and Fittings

As a result of monitoring the needs of elderly users in parks and investigating accidents involving them, improvements have been incorporated in new parks, where special aids are provided such as handrails, large size signage, non-slip surfaces.

Bowls Rinks

Lawn Bowls in both its indoor and traditional outdoor form is generally popular with elderly players who like an activity with a degree of challenge. Its attraction is that it is not physically demanding but a level of skill is required to play the game properly. In summer, the indoor game is preferred because of the air-condition and, in winter, outdoor play is preferred because of the fresh air. This game does help eye hand co-ordination and general exercise.

Sitting Out Areas

In all parks, specially selected firm seats at suitable heights are provided for elderly people. As many people come from very crowded and small living conditions, the landscape around these quiet sitting areas is specially arranged to give a feeling of tranquility.

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RECREATION AND SPORTS PROGRAMMES FOR THE ELDERLY

The provision by the Council is to allow the community independent use of its facilities or to participate in Council organised activities where, for elderly people, special programmes are made available. Examples include:

Swimming

In 1997, 121 swimming classes were organised in 16 pools. This is a particularly popular programme especially in summer, because it is accepted as an all-purpose fitness health improving activity. The organised programmes concentrate on aquatic aerobics that allows mobility of all limbs. In 1997, it was noted that some groups of elderly swimmers were practicing underwater exercise which had fatal results. The procedure was to hold their breath underwater to exercise their lungs; however, the result was cases of oxygen starvation to the brain and drowning. In order to counter this type of activity, special safety messages are broadcast at all pools to remind swimmers not to carry out this dangerous practice. As a safety precaution, all swimming classes for elderly people start with proper warm-up and cooling-down exercises to ensure good blood circulation.

Wushu

This is a competitive form of Chinese martial arts with the emphasis on style. It is popular with elderly people who have a martial arts background and who are still fit. The lion or dragon dance competition is the most popular whilst men follow the 'hard' styles and women participate in sword or fan exercises. The Council encourages these activities by providing the training programmes and competition opportunities.

General Fitness

General fitness programmes with mass participation are usually done to light music. The exercises and design for general well being are popular with elderly people because they involve low impact aerobics and last for 30 minutes per session. Participation is very casual and the atmosphere is relaxed. Western style fitness training is also provided for and exercise bicycling is the most popular because it allows socialising.

Archery

During recent years, this activity has become popular with elderly people in Hong Kong, especially women, many of whom are grandmothers. Many

have explained that their reason for liking this activity is that they did not have an opportunity to try it in their youth and that they were challenged by the skill required. Perhaps the attraction is that they can compete with men on equal terms in this activity.

Short Mat Bowls

Although a degree of skill is needed, this form of bowls played indoors has many attractions the most important of which is perhaps convenience. This programme owes much of its popularity to volunteers who help coach beginners who, in return, have been very responsive.

NEW FACILITIES

To further encourage elderly people to spend their leisure time in the Council's recreational facilities, it has established a policy to increase the provision of recreational facilities to meet their needs. Two examples of the Provisional Urban Council's future projects are:

Family Leisure Centres

This type of centre provides more diversified facilities for family enjoyment. The range of facilities to be provided for elderly users include indoor bowling greens, golf practising, indoor heated leisure pools and gateball courts. The Family Leisure Centre at Sai Wan Ho Reclamation in Eastern District, Shun Lee Tsuen Recreation Ground and Urban Council Sam Ka Tsuen Complex in Kwun Tong District are now under construction.

Morning Trails

Morning exercise is most welcomed by many elderly people. The Council has started upgrading and improvement works of the existing morning trails at Hatton Road at the Peak and Lei Yue Mun Park to provide suitable exercise equipment, rain shelters, seating benches, emergency telephones, directional signs and toilets. More morning trails will be incorporated into new parks and playgrounds under planning, for example, in Jordan Valley Playground and Hong Ning Road Park in Kwun Tong District, for use by elderly people.

To meet the increasing demand and recreational needs of Hong Kong's elderly population, the Provisional Urban Council will continue to provide more suitable and diversified facilities to meet their aspirations and expectations. As part of the planning process to provide elderly people with what they need, close consultation will be maintained with

organisations catering for older people as well, as the Hospital Authority, to identify what forms of practical and healthy recreation can be provided.

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