

HOUSING FOR THE AGEING POPULATION OF SINGAPORE

by James D. Harrison

Singapore's achievement in creating affordable homes for the majority of its population is notable, but the predicted increase in the number of elderly people has to be taken seriously in future planning. Whereas the multigeneration extended family has always been the cornerstone of housing policy in Southeast Asia, future generations will see some changes to this pattern. The need for a wider range of more specialized forms of housing and care for the aged is currently under discussion. The article outlines a number of initiatives to provide for these needs, and discusses how problems in both new and upgraded housing are being addressed.

Introduction

A visitor to Singapore would probably be impressed by the extent to which the rehousing of the nation's population has been fulfilled. Alone amongst cities in South-East Asia, Singapore has developed a built environment to match its increasing prosperity—a remarkable achievement, bearing in mind the scale of the task. Singapore has almost three million citizens and is almost completely urban in population density. Its people represent a culturally rich and diverse mixture, with 78 percent of the total population being Chinese, including a varied range of dialect groups and religions—Buddhist, Taoist or Christian. Malays, who are Muslim, make up the second largest group and account for 14 percent of the total. Indian people make up 7 percent of the population, with a relatively high proportion of Tamil people from Southern India, whose religions are mainly Hindu and Christian. In addition, there are groups of Eurasians, Caucasians and other ethnic backgrounds to make up the total complement of the island's residents.

Although the population of Singapore is generally regarded as "young," recent media coverage has reminded citizens that the "greying of Singapore" is an inevitable outcome of prosperity and declining birthrates. As with many major

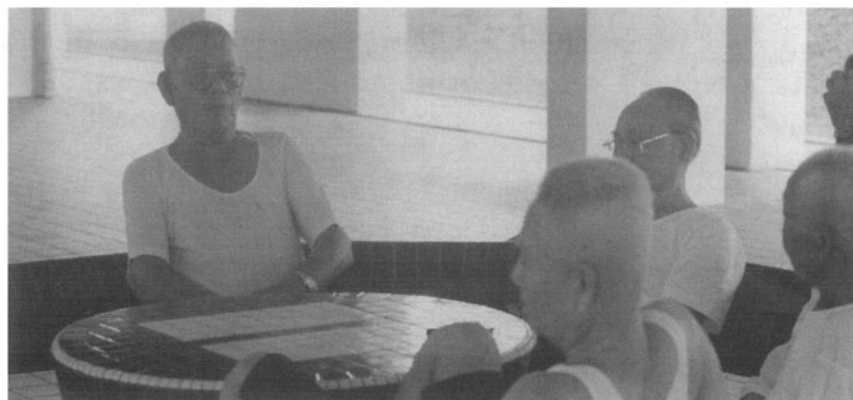
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cities, the numbers and proportion of elderly people will continue to increase in the coming years. Projections indicate that in Singapore in 2030, there might be as many as one million people aged 60 years or more, representing almost a quarter of the total population, as compared to only 9 percent in 1990 (Kua Ee Heok, 1994). Obviously such a shift will make significant demands on the built environment, a fact that has been the subject of much recent debate and media reports.

The Context of Singapore

Singapore is an island with a total area of about 646 square kilometres, linked to the southern extremity of the West Malaysian Peninsula by a man-made road and rail causeway. It is also an international and regional centre for both air transportation and sea-freight lines, and its strategic geographical position has had much bearing on its economic and trading development. With no natural resources, and importing almost all of its foodstuffs, Singapore's boast is that its one resource is its hard-working people.

Being less than 2 degrees north of the Equator, the island experiences a hot and humid tropical climate all year round, with frequent tropical rain and thunderstorms. Temperatures generally range between 25 and 35 degrees Celsius, with high temperatures even at night. With relative humidity generally above 7 percent, the climate can be unpleasantly oppressive but this, nevertheless, nurtures a superabundance of exotic vegetation which has earned the nation the unofficial title of



The void deck beneath a multi-storey block provides a regular meeting place for retirees.

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the Tropical Garden City. Although restricted in size, the island has extensive parks, forests and water-catchment reserves, and other leisure amenities have been included in the overall physical planning.

Historically, the city of Singapore dates back to the early part of the nineteenth century, when Stamford Raffles saw the geographical advantage of the island as a trading centre for the East Indies shipping routes. Singapore's colonial legacy led to ever-growing immigrant populations, some who can now trace their roots back over generations, others relatively newly-arrived from various Asian countries. After the end of British colonial rule, Singapore became an independent republic; since then economic success and rapid growth have been well tempered by foresight and imaginative planning, making the city a very "livable" place. Being an orderly society, with strong leadership as a major factor in social and political stability, the country has markedly low rates of unemployment, inflation, crime, violence and other social malaise, facts which in turn encourage foreign investment and continuing prosperity.

Asian and Western Influences

Social patterns in Singapore are quite complex, with varied traits of both Asian and Western cultures. Whilst the rapidly developing economy seems to demonstrate conspicuous Westernization, particularly in the acquisition of consumer goods, Asian social values are still adhered to, and indeed strongly encouraged by government, including the preservation of cultures and languages. In developing an understanding of the situation of elderly people in Singapore, the twin concepts of the extended family and of filial responsibility for the care and support of elders are of particular importance.

Singapore's achievements, particularly in rehousing an entire nation, are extraordinary even in a global context, and one might be forgiven for jumping to the conclusion that a form of socialism is at work here. In reality, this has been achieved by a finely balanced mixture of economic enterprise and deeper social values. Despite the universal provision of affordable housing, education and health care, Singapore is

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not a welfare state—indeed, there is a definite view that “welfarism” is a potentially demoralizing and enervating force. The social welfare concepts of European and North American countries are quite alien here, and such systems are viewed as being open to abuse. Instead, the support of society’s most vulnerable members is seen first and foremost as being the responsibility of the family unit, which is still very strong in the cultures represented in Singapore. We shall return to the application of this principle in our exploration of housing and the ageing population.

Social Stability and Housing

Continuing social stability has been created by government policies encouraging personal enterprise and providing good housing, education and health care, coupled with a low cost of living. Much of this success lies in allowing citizens to feel that they all have a personal stake in the country’s economic achievements, and that individual opportunities to benefit from them are in line with their own values and aspirations. One way in which this has been brought about is by the establishment of a Central Provident Fund (CPF) system for savings. Compulsory deductions, with tax relief, are made from the salary of every employee who is earning above a certain minimum wage, and his or her employer is also obliged to make a similar monthly contribution. Funds thus amassed by the individual, once a certain level has been reached and with specified provisos, may be used for a variety of purposes, as well as just remaining savings. These include Medicare schemes, investment in local stocks, insurance schemes and, most significantly, the purchase of property. Both the 20 percent down payment and the low-interest monthly mortgage loan repayments may be taken from CPF savings. Different repayment options and incentives are available under the Home Ownership Scheme for first-time or low-income families; similarly, extended families are given further encouragement by being allowed higher income ceilings than nuclear, single-generation families.

While there are wide differences in income between the ordinary worker and those who have prospered in the vigorous economy, a visitor to Singapore would be impressed by

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the absence of slums or inadequate housing, and the lack of conspicuous poverty, illiteracy or of other forms of social disadvantage—things which many tend automatically to be associate with Southern Asian cities. As well as having a well-planned and excellently maintained infrastructure, including roads, electricity, flood alleviation schemes and public transport, Singapore managed the rehousing of the majority of its population through concerted will since 1960, when the Housing and Development Board (HDB) was set up. Now some 86 percent of the population live in apartments built by the HDB, most of these being high-rise, slab blocks.

Although, at first sight, a Western visitor might associate such apartments in high-rise blocks with those generally offered for rental in Europe, in fact, only about 5 percent of flats built by the HDB are rented and the remainder are owner-occupied. Those that are owned are bought by their occupants, generally on a 99-year lease, but with maintenance provided by the Town Council for a small conservancy charge. Standards of construction and maintenance are high, and these high-rise housing forms actually work well in the local climate, whereas apparently similar types of apartment blocks in cooler lands are generally less successful, being expensive to heat and often blighted by poor maintenance.

Ageing, Family Patterns and Housing Policy

It is very common for young couples to start married life sharing an apartment with their parents—and even a grandparent or two. In addition to kinship patterns, this may be

The extended family is typified by three generations living together.



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attributed to economic constraints, since the initial investment when purchasing their own apartment can be costly. Many families rely on several wage-earners to maintain a reasonable standard of living, and where this involves a mother with young children, the economic sense of having a grandmother to mind the children is not lost on the whole family. In turn, many of the social ills associated with elderly people living on their own are avoided, and though other stresses within extended families may possibly be set up, these are not generally voiced as public problems.

The cornerstone of social patterns in Singapore continues to be the extended family, a shared tradition in the main ethnic groups which make up the population. Government policy, outlined by the Ministry of National Development, states unequivocally that "the aged should be supported by their families, the government and the community, to live and be integrated into the mainstream community for as long as possible to remain as independent as possible" (National Council of Social Services, 1996). Rehousing policies over the recent decades have positively encouraged this philosophy. Designs of apartments have taken this as a basic standard, and allocation methods by the HDB have long fostered it in a variety of ways. A number of schemes to encourage ageing parents to live with, or close by, their families have been implemented with varying degrees of success. One such incentive, the Joint Ballotting Scheme, introduced in 1978 gave priority to parents and married children who took apartments next door to each other. Similarly, the more recent Joint Selection Scheme encouraged parents and married children to select flats in the same estate, although purpose-built "granny-flats" adjacent to the married children's unit have been less popular. By means of financial benefits and by giving priority to buyers who wish to house two or more generations of their families under the same roof, support for the extended family continues to be given.

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Changing Living Arrangements

Although the three-generation family is still the norm in Singapore, as elsewhere in Southeast Asia, sociologists and politicians express concern that greater affluence and inde-

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pendence of younger generations may cause the breakdown of this tradition, as with other "Asian values." Along with this apprehension goes the concern that there may be an increasing tendency for families to be unable or unwilling to accommodate their elderly parents. Where Asian values are still strong, the idea of special housing for the elderly citizens has a certain stigma attached to it, even though not every ageing parent has offspring who can offer a place in their home. With falling birthrates and greater longevity, there simply may not be enough families in the future to provide accommodation for every elderly person. Childless couples, single people, or those who emigrated from other countries without their families certainly do exist in Singapore, but people living alone represent a much smaller number than they do in the West. Of course, there are those people who wish to preserve their independence for a variety of reasons. These elderly people, however, remain the exception rather than the rule, and although housing policies have not encouraged such living arrangements but have included housing for them as a necessary provision, current moves are being made to help this segment of the population.

There has, without a doubt, been a softening of attitude towards those elderly people who diverge from the norm and are looking for some degree of independence, and towards those who have no alternative. The 1990 Population Census showed that some 20,000 elderly people live on their own, without family support, and probably without real income to be able to choose their own homes. For those elderly people who cannot support themselves, a number of charitable and religious Voluntary Welfare Organizations (VWOs) also play an important role. The efforts of these organisations are generally supported and coordinated by the National Council of Social Service, even to fund-raising, which is centralised through a "Sharity" scheme.

Retirement Age in Singapore

The actual retirement age in Singapore is 60 years, although recent discussion has suggested that, with increasing longevity and higher medical standards, this could be raised to 65. Conversely, the age of 55 still represents a certain threshold,

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because this is when CPF funds are released to the individual, and because this is also the age at which a person might see his children marry. At present, few people at this age appear to change their lifestyle to prepare for retirement in advance, but future retirees will be better educated and will have better health care—and they will have higher expectations for their retirement.

Shift towards Personal Independence and Mobility

One aspect of housing and the built environment is how well it promotes mobility and personal independence for those people who are less mobile or more vulnerable. Until 1989, there was no legally-enforceable code to require owners to make their buildings accessible for disabled or elderly people, although government authorities such as the HDB and the Public Works Department (PWD) had their in-house standards. The Singapore Institute of Architects (SIA) also had a voluntary code, but developers were unwilling to spend money on ramps or toilet facilities for wheelchair users. The actual number of registered disabled people in Singapore at that time was low—mainly because there were few incentives to register, and therefore, those parties striving to get a code enacted found it difficult to put up a convincing argument. Only when the increase in the number of elderly citizens was added could the mandatory code be numerically justified; significantly, the first (1989) *Code on Barrier-Free Accessibility in Buildings* is prefaced by an explanation that it “has been designed with special provision to serve the elderly and the physically handicapped.” Thus it might be said that an increasing awareness of the needs of the elderly population swung the balance to bring the accessibility code onto the statute books.

Independent mobility in public areas is still restricted for disabled people. Car ownership in Singapore is limited, mainly by the application of quotas and real financial disincentives. Under certain circumstances a disabled person can apply for a waiver to these restrictions, but cars tend to be beyond the reach of the majority of disabled and elderly people. Motorized wheelchairs are hardly, if ever, seen in public places, which might be explained by the fact that storm-

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drains and high curbs still present obstacles to their use. Many changes have been made, however, to provide barrier-free environments in public places, but there is still much to be done.

Housing the Nation: HDB's Contribution

We have already seen that the Housing and Development Board (HDB) is the major provider of homes; it is the sole authority responsible for the physical planning and implementation of public housing development, and it is the major developer within the nation, providing affordable lower-income and middle-income housing for sale or for rent, as well as furnishing estate management services. In addition to planning and realising the housing itself, HDB is also responsible for the development of various public facilities for new towns and precincts, including shopping centres, markets, community centres, sports complexes and swimming pools, and many other facilities. Most of the housing areas in the island are in "new-town" developments. This concept, based loosely on the British or European post-war model, creates distinct town centres, with appropriate social amenities as well as transport interchanges, shopping centres, religious and cultural centres and other facilities. Clustered around this hub are smaller neighbourhood centres, or precincts, with those amenities essential for daily living, such as food shops, primary schools and polyclinics, all within easy walking distance of each other.

Wong and Yeh's book, *Housing a Nation*, states the HDB's role in achieving "Certain national objectives, such as population redistribution and integration, preservation of traditional Asian family structure and encouraging upward mobility through providing opportunities for home-upgrading" and though these are still the driving principles, some adjustments in approach have been made.

In 1989, the HDB devolved some of its centralized power by setting up Town Councils, giving citizens more say in the future development of their neighbourhoods, which have allowed for a more local character to be developed within the new towns. This has been particularly successful in recent upgrading schemes of older housing areas, where resi-

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dents have been able to choose some of the amenities which they wish to see introduced or upgraded. The HDB still sets the standard and carries out the work, and certain common features are included in every upgrading scheme.

Renewal and Redevelopment Schemes

In the public spaces around the housing blocks, more public garden spaces are created by building multi-storey car parks. Parking for the disabled is provided near entrances, and level wheelchair-accessible and covered walkways are provided from car park to lift lobby. Ground floors of most housing blocks have open "void decks" at ground level, which can be used for social functions, such as wedding feasts and funeral rites, as well as for informal recreational space, and it is common to see groups of senior citizens sitting and playing chess in these breezy areas. Recent upgrading schemes have often incorporated more permanent areas in the void deck space, in which senior citizens can meet or watch television in comfort.

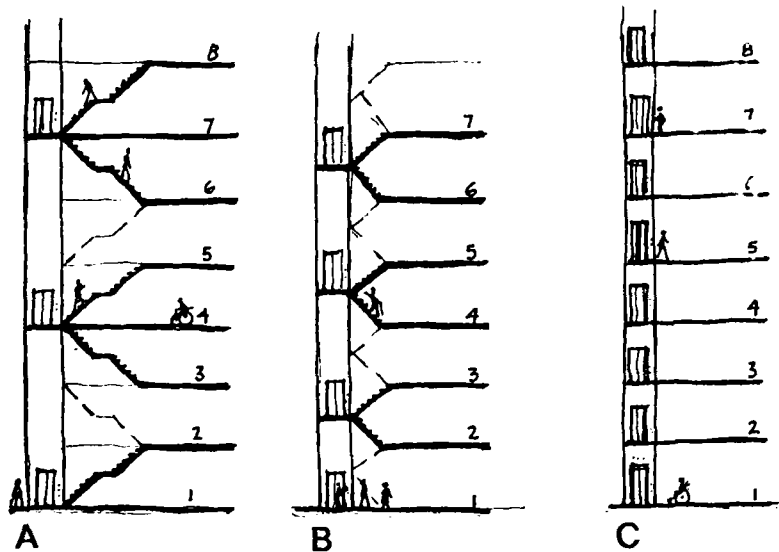
While the HDB has provided lift (elevator) lobbies to all floors in developments built since 1991 or so, access to every floor can be problematic in the upgrading of blocks built before that time, when lift lobbies were only provided at intermediate floors, on the principle that occupants could walk up or down one flight of stairs and costs could be reduced. Now, with increasing emphasis on the needs of the ageing population, this limitation has to be addressed in upgrading schemes, where lift access is provided to every floor wherever structurally possible (see Figure 1).



Covered walkways and lush plantings are appropriate to the tropical climate in a new Housing and Development Board (HDB) estate.

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Figure 1
Some Configurations of Lift (elevator) Lobbies



A—An older type, with walk up/down one storey: relatively easy to convert to full access; B—Another older type, with half-flight up/down to floors: difficult to convert to access any floor; and C—All lifts (since 1991) have had access to all floors.

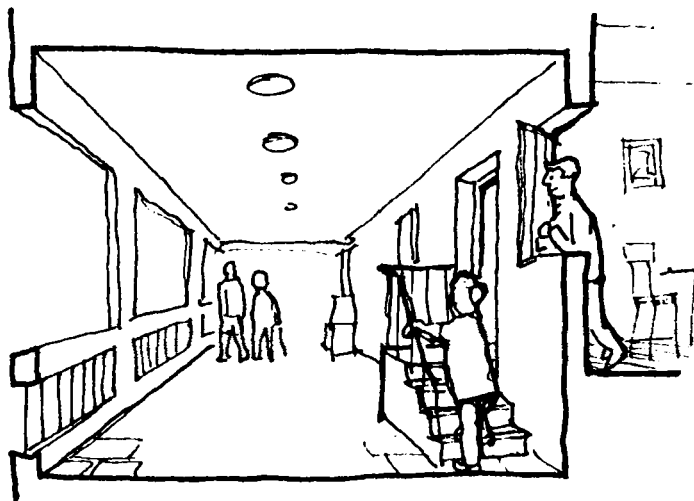
Although the designs of most housing units themselves do not make specific provision for elderly or disabled occupants, the HDB treats applications for necessary modifications to flats on a case-by-case basis. Home-owners naturally have some degree of freedom to renovate their interiors to suit their needs, but entry from access decks may be hindered by raised thresholds or even by short flights of steps. In some older developments, for instance, the floor level of flats was designed to be raised above the public corridors in order to increase privacy, and barrier-free access is difficult to achieve in these circumstances (see Figure 2).

The "Congregate Housing" Concept

Many of the practical problems of making older housing blocks more livable for elderly inhabitants are currently being addressed in a new joint venture between the Ministry of Community Development and the Housing and Development

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Figure 2
Older Housing Block



Some older housing blocks had floor levels above common walkways that are difficult to adapt for wheelchair access.

Board, acknowledging the fact that not all elderly people are able to live with their families. In this program, existing blocks of one-room rental flats are improved to allow for their use by elderly people. These units are self-contained and have a separate shower, bathroom and kitchen.

All of the flats and public areas in these blocks are modified to make them more accessible, including lift access at every floor—where previously it might only have been to some intermediate floors. Doorways are widened where necessary, and thresholds and steps are removed so that a wheelchair user can live there. Additional design features include lower kitchen worktops, power points (electric outlets) at reachable heights, lever controls for faucets and lever door handles, toilets to replace the original Asian squat type fittings, grab-bars and modified clothes-drying lines, all of which are designed so that an elderly person may live an independent life. All flats also have provision for an alarm system—only completely installed if there is an elderly occupant. These have cord-pulls in the toilet and in the living room, and indicators are provided outside the unit and at ground level to alert other residents when the occupant requires assistance.

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Communal corridor areas are improved by removing some of the units to allow more light and to provide common social and sitting areas at each floor level. At ground level, in the void deck space, a "Seniors' Activity Centre" is built, which is "adopted" and run by a voluntary welfare or religious association, to create a social centre with games, television and exercise equipment. Some of these day-care centres also incorporate consultation rooms out of which a physiotherapist or counsellor can operate.

What is significant, however, in the planned renovation of these blocks is that the projected ratio of elderly residents to other residents is to be kept at a maximum of 50 percent, in order to prevent them from becoming old-folks' ghettos, and to foster some form of multigeneration spirit. Young people, who would not normally qualify for an HDB apartment, are encouraged to rent apartments in these blocks, even though they have all been modified for elderly users. Family service and counselling centres will be incorporated to cater to all age groups.

So far, three blocks of apartments have been converted, giving a total of 970 units. Some ten more blocks are undergoing conversion in different parts of the island, and care is taken in the building program to ensure that residents are not relocated away from the area in which they have been living. Although these are seen as pilot projects, phased future developments may see significantly more of these blocks being converted in each part of the city and, in particular, where there are high concentrations of single elderly people.

*Inside a new "Senior Activity Centre"
in a recently upgraded congregate
housing block.*



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The senior activity centres incorporated into these congregate housing projects will be open to residents of nearby blocks as well. More day-care centres are being introduced into many other HDB estates, some with specific groups of elderly people in mind, but often with the main intention of providing a place where an elderly person can usefully spend time, for instance, if their relatives are all out at work or school. In addition, future planning of facilities for those elderly people who need more specialised forms of care is currently under serious study—although it is still too early to find more precise details.

Sheltered Homes for the Aged

Currently, there are some 19 Sheltered Homes for elderly people without families, which are run by community service organisations or religious bodies. They are generally located in HDB estates and are quite small in size and with limited facilities. In 1991, the National Policy Committee on the Family and the Aged recommended that larger and more cost-effective sheltered housing be set up to cater to the needs of the “ambulant and fairly frail aged who are still able to manage their own activities of daily living.” This is to be provided both in the private sector for the more well-off elderly people and by Voluntary Welfare Organizations (VWOs) with support from the Ministry of Community Development and the National Council of Social Service. Guidelines on the setting up and running of homes and the standards of accommodation have been developed by the participating bodies, and these stress the value of independent living for the residents and of their integration into the community. Full-time staff will live in, and sites will be chosen close to HDB neighbourhood facilities, such as polyclinics, shopping centres, public transport and community centres. The size of the homes themselves is set at approximately 150 residents, in twin-sharing units for couples, or groups of 3 to 4 people, and each unit will be relatively self-contained, with its own kitchenette. Communal facilities will include kitchens to provide meals to residents who are unable to cook for themselves, and a multipurpose hall and dining room will be a central social feature of the home, available also to elderly people in the neighbourhood as a day-care centre.

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In addition to sheltered housing, there are also nursing homes run by both the private sector and by voluntary welfare associations, which also provide subsidised care. Occupancy figures for these institutions are not available, but they appear to be answering the needs of those who can no longer look after themselves.

Other Initiatives for Housing for the Elderly

So far, private developers have not built any purpose-designed housing for retirees, which is fast becoming popular in the West and in Australasia. However, there are proposals by the Singapore National Co-operative Federation and the National Trades Union Congress to develop a small condominium-style "retirement village" which will be sited near an existing town centre in an HDB estate; a newspaper report states that "The village is likely to be targeted mainly at retirees aged between 55 and 65" with reasonable financial status. The report quotes the chief executive of SNCF as saying, "We hope to instigate a new healthy lifestyle for senior citizens that will integrate rather than isolate them from society. It is a lifestyle that (they) can get used to and pursue with independence and integrity" (*Strait Times*, Singapore, January 19, 1995).

Another similar project has recently been announced by the Salvation Army to create a "retirement village" with single and adjoining apartments for those who can afford it, with a gerontology clinic and a nursing home. Details are not yet available, but this will be an "income generating project" to help fund other projects planned by this organization, including a subsidized nursing home for 340 elderly patients to be built in another part of the city.

Promoting another concept, the Singapore Action Group for Elders (SAGE) has ambitious plans to create an elders' village in Singapore. The first phase of this development, now nearing completion, does not provide for permanent residence but has 50 rooms for temporary stay, to enable elderly people to attend social and educational activities and courses, as well as to provide accommodation for respite and crisis stays. The mainstay of the centre is its social and recreational facility, but there are additional medical and nursing services, nutri-

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tion programs, as well as an "Elders' University" to allow senior citizens to continue or make up their own education after retirement. Future plans may well incorporate more permanent housing for elderly residents.

Future Policies

As we have seen, some interesting developments for elderly people are already underway, and those involved eagerly await the "National Survey of Senior Citizens"—the publication of which is imminent. As we have seen, past and present government housing policies have been careful to keep the benefits of the extended family intact. Therefore, the discussion of special housing for the elderly population is still seen more as the exception than the norm. Provided the extended family system continues to work, there is a great deal to be said in its favour. Certainly there will be changes, and we may be sure that the HDB has considered future policy with respect to the changing profile of those they will be housing, and in particular the increasing numbers of elderly people, as well as their higher expectations and personal independence. Consideration may have to be given to such concepts as "lifetime homes," where housing units are designed to be accessible and adaptable, so that occupants who become less physically able do not have to move house or bear the cost of expensive structural alterations. Housing solutions which perpetuate the advantages of the extended family will continue to be developed, but provision for those who



Future housing and social needs of the elderly will inevitably bring some changes in the built environment.

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fall outside this mainstream needs to be given equal consideration in the future.

About the author: James D. Harrison qualified as an architect in the United Kingdom, and he has practised and worked there and in Central Africa. Since 1984 he has been a Senior Lecturer at the School of Architecture, the National University of Singapore, and in recent years he has been teaching and researching topics related to accessibility and designing for elderly and disabled people.

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