

Elderly Living Development in China

Comparing Swedish Situation

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Abstract

China today is an aging society and the amount of aged will grow larger with extremely fast speed in the coming forty years. Sweden met the ageing problem earlier and has established a relatively comprehensive living system for the elderly in previous decades, though numerous deficiencies still exist. Objectives of this paper are expressing 1) elderly living development status in current China and 2) how to imply Swedish knowledge of elderly living, especially senior living to Chinese projects. Different types of living for the elderly in Sweden are introduced: staying at home, senior living, secure living and nursing homes. Compared to Sweden, development of elderly living in China is in initial stage. Background, existing development, different elderly livings (community renovation, house for aged, apartment for aged and home for aged) and a case study which reflects senior living progress are described. Result of this study concludes drawbacks of existing elderly living in China and their causes. Different practices in the two countries, including locations, finances, labors, previous experiences, understanding of living at home, participation and Swedish metrics of elderly living are discussed to explore knowledge and experiences which can be referenced in elderly living development both in China and Sweden.

Key works: elderly living, senior Living, locations, finances, labors, previous experiences, understanding of living at home, participation

1. Introduction

China is facing serious aging problem in the coming 40 years, with the number of 170 million people aged 60 and above now and be up to 400 million (25% of the total domestic population) in 2050. As a fast growing country, existing elderly livings and related facilities, service and health care in China today are weak. Facts of insufficient elderly housings and beds, unadoptable environment, unscientific management approaches, unsound pension system, limited knowledge, etc. set up a great number of obstacles to China's elderly living development.

In Sweden, like many European countries, the number of elderly people is increasing. With 17.2% of people aged 65 or older, it was one of the oldest countries in Europe (13.9% in 2000) and the percentage will be up to 30.3% (Walker, 2009) or 25% in 2050. (SCB, 2010) With well-established pension system support and aging development for decades, relatively mature aging aspects, such as elderly livings, accessibility, facilities and related mental development for aged can be recognized as advanced examples for China's development.

Though the two countries have various differences, such as economic development stage, population density, climate, culture, habits and customs, both common official and cultural views which encourage old-age pensioners to live in their own houses as long as possible decides knowledge and experiences in aging issue within the two countries are worthy to be shared with each other. Besides, it is always universal for people to face becoming old physically and mentally as human nature is common, especially when people grow old. How to provide a mature living environment which ensures elderly's daily life, health care and psychological satisfaction is always a common aim of humans.

2. Research Question

A study is conducted to explore how China's elderly living develops and what kinds of knowledge and experiences can be learned from Swedish situation.

3. Methods

Data collection

Data for this study in Sweden comes from a reading list of the course "Residential Healthcare-housing for Senior" in Architecture department, Chalmers University of Technology and Chalmers library database with the key words of "Swedish elderly living", "Swedish nursing home", "Swedish senior housing" and "Swedish Example", etc. Data for the study in China comes from recommended reading list of Elderly Living Research Center, China State Construction Engineering Corp (CSCEC) and Google search with key words of "Chinese elderly living (中国老龄住宅)", "Empty-nest elderly(空巢老人)", "Housing endowment(以房养老)", etc.

Senior |Living - specific field of elderly living selection

Existing China's aged finance cannot support most of the cost of elderly's living and care. Private property, as a strong support of elderly living development, plays a significant role in this issue. However, property companies prefer the projects which bring as many benefits as possible. Management of four main types of elderly living which is showed below (Liu et al., 2009) reflects senior living is the most profitable (Price of house is higher than the others) and easiest-control (no

need for coordination with government) type of the four. Besides, the fact that aged prefer an environment where they can enjoy friendship, professional service and care but also “four walls in a room” indicates the needs of market in senior livings. Furthermore, as the fast increasing Chinese economic, people’s life level and attitudes are changing and high quality of living will be required. Senior living has the possibility to become increasingly common in China and it is meaningful for introducing detailed information in senior living both the two countries.

	Community renovation for aged	House for aged (Senior living)	Apartment for aged	Home for the aged
Main Management Approach	Runs by government and aged	Developed by property companies Rent or buy	Runs by government or property company People usually Rent	Developed by government or charities, non-profitable

Case study

Case selection: Cherish-Yeam is a unique case in this study as first, senior living is in the innovation stage in China and seldom built cases can be found there. Second, quality of the finished projects are uneven, while Cherish-Yeam is recognized as much higher than the others. Field study and interview are used as approaches of this case study. *Field Study:* Field study in Cherish-Yeam was contacted on June, 11th to June, 12th, 2012 in Cherish-Yeam retirement community, Nanhui, Shanghai. Whole duration lasted 36 hours and the activities of users were followed: entertainment, sports, eating in canteen and living (hotel there provides same settings of the normal senior livings in the community), etc. *Interview:* Ms. Wang Lifen, who has been working in Cherish-Yeam Co., Ltd as researcher commissioner for about two years was assigned and responsible for guiding in the two days. Mr. Li is a self-helping aging people in Chereish-Yeam. He retired from a university about 20 years ago and has been living in Cherish-Yeam with his wife for more than two years. Main reasons of being chosen for interview are first, Mr. Li is a typical resident in this community: having stable welfare, living with couple, children are living in different cities, etc. and second, he lives in Cherish-Yeam longer than the other residents who were talked.

4. Elderly Living in Sweden

From a retirement age of 65, people may have to experience several decades and need different kind of living styles when they grow old. From chronological perspective, people aged 65-75 is recognized as younger old, 75-85 as mid-old, while 85 and above as old-old. (Dehlin et al., 2000) Older is divided into independent aging from 65 to 85 and dependent aging older than 85.

4.1 Different kinds of living for elderly

Elderly living market today provides a variety of solutions which meet the specific needs of the old as followings: staying at home, senior living, secure living and nursing home. (Edström and Gustafsson, 2011) Most of the aged after retiring (65 year old) are healthy, active and enjoy life. In the independent life, they can choose to continue to live at home or live in senior /securing living where they have opportunities to communicate to peers. However, older people will often need terminal care in the end of their life. Dependent elderly can choose to live at home but need provided nursing care or live in nursing homes (specialized care).

Living at home: Approximately 93% of the elderly in Sweden live in ordinary homes with or without home help. Elder people who continue to live at home can obtain many kinds of support to make life easier, such as providing ready-cooked meals as home-delivered. When elderly people are no longer independent with daily life, they can apply for home-help service and keep on living home. (SWEDEN.SE, 2012)

Senior living: Senior housing which likes the ordinary housing is provided for the people who are healthy and independent between 55 and 75 usually with the aim of creating communication opportunities to elderly and their peer neighbors.

Secure living: It is called assisted living or serviced apartment in some other case. This kind of living which can be rented or bought by residents is provided for the residents older than 70. Usually there are common areas like senior living with emergency alarm in each apartment and a possibility to get meals delivered. (Edström and Gustafsson, 2011)

Nursing home: A large number of older people suffer from illness and become dependent on other people in their daily life often in need of care in nursing homes. (Westin and Danielson, 2007) Nursing homes run in different ways in Sweden. Some provide a single bedroom and shared areas for the residents. Nursing and service are available around the clock and doctors come also. Some nursing homes provide permanent living for elderly who have less possibilities to recover, while some offer short-time living for the senior citizens who get sick but recover a certain time later. (Edström and Gustafsson, 2011)

Specialized care: This kind of living is set up for the aged who suffer from some specific disease and need doctor, nursing and all kinds of services all the time.

4.2 Senior living in Sweden

In Sweden, a new (Dec, 2008) state investigation proposed two kinds of senior housing (senior housing for independent living/ senior living and senior housing for assisted living/ secure living) and a new concept of special housing for assisted living and complex care. (Paulsson, 2011) As Swedish policy encourages elderly live at home as long as possible, older people spend much of their daily life within the home and neighborhood environment. (Haak, 2002) In order to live in an environment where daily services or nursing care is provided, surroundings are accessible and peer neighborhood relationship prevent them feeling isolated, senior housing is recognized as good kind of living for the elderly when they retired but still have healthy physical situations.

Architectures and facilities

Locations of senior living in Sweden are usually in town so as to provide conveniences for aged. (Edström and Gustafsson, 2011) Senior housing for independent living apartments usually likes ordinary apartments. Share areas, which are easy to get in, such as gathering hall, gym, sauna, game room, library, swimming pool, outside area are provided. (FONDEN, 2012) Accessibility on design is required. Besides, details, such as lower position of thresholds and oven, lifts with seats and rails, different colors of the final stair from the others and more special facilities in bathroom and other places. (Edström and Gustafsson, 2011) Senior living for assisted living (secure living) has the basic

principle that each person lives in “their own four walls”, leads their daily life more or less how they wish with ongoing care and assistance. (Feddersen and Lütke, 2009) Besides similar requirements of independent living, certain security-providing factors, such as an emergency alarm, which can be answered by and dealt with rapidly, are set up in each room. Buildings for outpatient health care and nursing in communities are required.

Homelike environment is created in senior housing as the feeling at home is not only individually determined but can be influenced by the senior housing policy, such as arranging furniture similarly to their previous housing has positive perceptions and feelings of security. (Wikström, 2010)

Service and nursing care

Senior housing for independent living: In most cases basic services are provided, such as meals, cleaning services and other general support services. Besides, they offer cultural activities from reading to courses, visits to the theatre and even holidays, at additional cost depending on the activity. (Feddersen and Lütke, 2009) Senior houses for independent people can have no nurses or nurses on duty. Senior living for assisted living as ability to adapt the environment of new living place is limited for senior citizens by decreasing sensory function, creating an environment that corresponds to the older person’s earlier life plays an important role of nursing care. (Wikström, 2010) *Senior housing for assisted living:* This kind of elderly living arranges with nursing, health care and alongside nursing homes. Ancillary services like senior housing for independent living are included.

Financial support

In Sweden most elderly care is funded by municipal taxes and government grant. Almost only 3% of the annual total cost of elderly care was financed by patient charges. People who have worked and lived in Sweden will get a national retirement pension based on the income on which they have paid tax. The national retirement pension consists of income pension, premium pension and guarantee pension (SWEDEN.SE, 2012) With the support of high tax system, basic pension provides elderly basic economic security, housing subsidies makes sure retired people have living places, provincial government provides health care security, while municipal government provides social service security. (Zhao, 2010)

5. Elderly living in China

5.1 Background

An aging society

Currently, China has already been in an aging society. In 2010, the amount of retiring people (60 and above) in China was 178 million, which gained 13.26% in total. The number of people aged 65 and above was 119 million, which occupied 8.87% in the total and increased 1.91% from 2000, comparing 1.39% from 1990 to 2000. (Li, 2012) The number is expected to reach 307 million and gains 20.43% in total in 2050. (Zhang, 2011) Population Aging in China is fast and will be much quicker in the coming 40 years.

One main cause for the increasing number of old-age pensioners in China is the improvement of life level and health care and average life expectancy is increasing. The average life expectancy of Chinese grew from 68 in 1996 to 73.5 in 2011 (Zhang, 2011). The second reason is Chinese One-child policy

from 1979, which reduces younger population in the last 30 years, makes “421” (four elderly, two adults and one child) as main family structure in China from now on. As the economic development and opinion change, nuclear family is recognized as main life style in cities of China. In the background of “421”, empty-nest family (elderly live without children) exists and increases fast. In the end of 2009, empty-nest families occupied more than 50% in China and higher than 70% in some main cities. (News, 2010) It makes a great number of empty-nest elderly to be lack of daily care physically and mentally.

Policy and Finance

According to the existing economic and social situation in China, related aged living policies were proposed. From “The development of China’s aging twelfth Five-year Plan” and “Social aged service system planning of 2011-2015”, living at home is the main solution of care for the aged. “9073” policy suggested that 90% of the aged live at existing homes with assistance of service and care, 7% of the aged move to new senior communities where aged service and care are provided, 3% of the aged live in special aged institutions. Different areas proposed specific related policies for elderly and their livings according to different areas’ living and economic levels, such as pension increasing, accessibility facilities improvement and preferential policies to encourage aging living development.

Unlike developed countries, which have already set up a mature pension system for the finance of aged people and their livings, large amount and fast increasing speed of aged people in the developing China decides it is impossible for the government to take most of the financial charge of this issue. Homes for the aged are developed by government or charitable organizations and face the elderly who have no personage, no regular income and no work ability. Different kinds of investment from society are encouraged to take part in the development of other kinds of elderly livings, such community renovation for the aged, houses for the aged and apartments for the aged.

Existing conditions for elderly

Development of elderly living in China is slow. First, the number of beds and buildings for aging care is far from existing needs. Until the end of 2009, the amount of elderly living in China was 38,060, beds were 2,662 million which cannot satisfy domestic needs. According to international standards, 5,688 million beds are required. (Doc88, 2011) Second, existing condition of aging care cannot comfort aged mentally. Unadoptable facilities which are not designed from retired people’s needs and unfamiliar living environment leads to the feeling of being alone when elderly move to aging care housings. Third, changed life styles in new places make aged feel uncomfortable. Single managing approach in the existing aging care housing changes elderly’s life style from initiative before to passive now. (Zhou and Zhou, 2009)

5.2 Existing living for elderly

In China, there are four main kinds of elderly livings currently as following: *Community renovation for aged*: As a main approach for the aged living development, accessibility facilities and buildings for elderly care are improved in the existing communities. This solution encourages old-age pensioners to live at home and the familiar circumstances as long as possible. Besides, using existing health care and facilities reduces cost. However, it is hard to improve existing environment to meet standard elderly buildings’ requirement, such as it is impossible to add elevators in the old residential buildings. *Nursery*

for the aged, where elderly live there and enjoy daily life, entertainment and health care around the clock temporary, is recognized as a support solution of elderly care in communities.

House for aged (Independent senior living and Senior living in mixed community): Senior living can be formed by independent senior living and senior living in mixed communities from community perspective. (Ma. H. and Zhao, 2002) With the fast development of an aging population, the huge aging market in China attracts real estate companies to invest in these two kinds of elderly living. With the metrics that aged can communicate with peers and share service and nursing care resources, independent senior living in European and American countries developed maturely but still at the starting stage in China. Unlike ordinary housings, which are expected to be sold and finished with financial circulation as soon as possible, independent senior living requires developers not only to sell the housings, but also maintain daily life and care for elderly when they live in the communities. This brings a serious of difficulties, such as a long financial cycle and hard service and nursing care maintenance. Senior housing in a mixed community is recognized as a rational choice for developers in the present stage as senior housings in this case can be sold like ordinary housings and satisfy the needs of the market as well. However, professional facilities around communities, service and health care cannot be provided as well as those in independent senior living.

Apartment for aged (Senior apartment): Apartment for the aged is defined as apartments which fit aged's mental requirement and provide daily meals, cleaning, entertainment and healthcare for the elderly (JGJ122-99, 1999). They are usually developed, rented and managed by property companies and runs with profitable aims. According to different levels of elderly's self-care ability, self-helping aged people, device-helping aged people (elderly live with the help of railing, crutch, wheelchair, elevator. etc.) and under nursing aged people (elderly live with the help of nursing care) are defined as three kinds of elderly. Independent elderly apartment, service elderly apartment and nursing elderly apartment are designed accordingly.

Home for the aged: Most of the aged home are developed and managed by government or charitable organizations so as to solve low income elderly's life. As limited finance resources, facilities and service in old-age pensioners home are usually in low level.

5.3 Statistics and analysis from Zhao (2010)

From a description of Zhao, 1,003 people in different ages from five main cities in China were interviewed. Existing living situations of interviewees include nuclear family (36.5%), couples without children (18.8%), living alone (17%), living with two or three generations (27.8%) and others (5.1%). It reflects the trend for family size becoming miniaturized.

Question 1: Which kind of aged living you (or your parents) wish to? "Living in different apartments but in the same communities with children" gains 33.6%; "Living alone in a familiar environment" gains 16.7%, "Living together with children" gains 14.8%, while "Living in nursing house or elderly house" gains 7.1%, which is the lowest. *Question 2: Which kind of environment you wish to live after retirement?* "Living in the cities where I have lived for a long time" gains 26.1%, "Living in the place which has advanced environment, health care facilities and service" gains 23.7%. *Question 3: which situation of you (or your parents) will choose to live in elderly living?* "when I (they) cannot take care

myself (themselves) in daily life” gains 28%, “When I live alone” gains 15.5%. *Question 4: What kind of elderly living condition you wish to?* “Enjoying professional care and service, while enjoying living with family at the same time” gains 21.9%, “I (they) can live in an individual place, while enjoying common areas for communication” gains 18.0%.

From Zhao, “Facilities and residential buildings for elderly”, Question 1 reflects the opinion that aging life is still limited in depending on children but hard to accept to living in elderly housing; Question 2 demonstrates that though people hope to live in a familiar environment, they would like to enjoy good environment, health care insurance and professional services also; Question 3 expresses that most of the people are not satisfied with the existing conditions of elderly living and will not live there until they cannot look after themselves (or their parents). Besides, it also illustrates that people still considering elderly living as places for nursing care and recovering. Question 4 tells requirement of secret respect of aged. (Zhao, 2010)

5.4 Senior living in China

Case study: Cherish-Yearn retirement community

Cherish-Yearn Co., Ltd. is a property companies in Shanghai, China. Shanghai Cherish-Yearn retirement community (Cherish-Yearn), which is developed by Cherish-Yearn, began to be lived in 2007 and is the first membership senior community in mainland China. The project locates in Kangqiao district, Shanghai with 84,000 m² for plot area and 100,000 m² for total area.

Management approach: Cherish-Yearn runs in a membership system. Elderly who meet conditions can live in the community when they have membership card. Two kinds of membership cards are provided. Card A needs people to pay a deposit (980,000 RMB per one) in advanced and annual fee (35,000 to 45,000 RMB per one) when they live. Elderly can return or sell their card by themselves and get the whole deposit back. Card B needs people to pay a less deposit (450,000 to 880,000 RMB) comparing to Card A and the same annual fee. Deposit is divided into 15 years and elderly can get the rest of the year of deposit when they would like to move out. Property right of the living is belonging to Cherish-Yearn but not aged.

Enterprise Resources Planning for elderly (ERP) is patented by Cherish-Yearn in China and is used to manage all information of Cherish-Yearn, including community safety monitor, member acceptance and management, member information management, etc. Specific suggestions and adjustments are given to aged according to their specific life needs and health record in ERP.

Architecture planning and design: According to Ms. Wang (2012), Cherish-Yearn includes 11 residential buildings for 1,600 self-helping aged people, one buildings for their daily health care and 110 under nursing aged people, one buildings for hotel, one building for gym (opens to members outside also), one building for canteen and one building for retails. Common activity areas, such as library, computer room, chess and Mahjong rooms, cinema, mini gym, dancing room, piano room and salon are located in the first floor of the 11 self-helping aged people buildings. Outside activities, such as gate ball playground, basketball playground and roofed corridors connected to different buildings are in the outside space of the community. Accessibilities are designed all around, such as accessibility ramps, railings in corridors and washing rooms, alarms and larger size of elevators. Ms. Wang (2012)

mentioned as the people in this community grow older, space for nursing aged people will be not enough and they are planning to build a new nursing building near the existing one in the coming future.

Service and nursing care: Most of the elderly live in this community are self-helping aged people. Life secretaries, health care secretaries and entertainment secretaries are provided. Life secretaries are in charge of elderly's daily housing maintenance and cleaning, health care are in charge of regular physical check, while entertainment secretaries are in charge of daily activities and travels. As community is far from town, shuttles for going to town and returning are provided in every weekend. Residents can book the daily necessities they need in register desk and workers will shop for them. Doctors in the community hospital are delegated as family doctors of residents and give specific diagnosis to retired people from their health records in ERP system.

In the building for nursing aged people, doctors, beds, nursing workers and meals are provided around the clock. The livers in this building come from this community but outside also. Besides, "Time bank" is utilized in Cherish-Yearn. It cultivates self-helping people to take care nursing aged people if they can and "earn points" for their future when they need nursing care.

Views from residents: Mr. Li (2012) and his wife have been living in Cherish-Yearn for more than two years as self-helping aged people. Motivation for them to move there is all of their children and their own families are living in Canada now and they cannot take care of the two aged regularly, while service and nursing care in Cherish-Yearn make them assured their parents live in Shanghai safely. Mr. Li (2012) mentioned they would not move abroad with their children because Shanghai is the environment they are familiar and they can meet friends often in weekends. They have video call once a week with each child and the whole family meet together in Shanghai in Spring Festival every year. Mr. Li (2012) satisfies most of the issues in Cherish-Yearn. He and his wife take part in different clubs with peer neighbors in the community, while most of the services are provided. Body check is made once a week and hospital in the community makes sure they can get emergent ambulance when they feel sick. Regarding the finance, Couple Li's deposits were paid by children two years ago, while rental from the old place they live in town of Shanghai are paid as a maintenance fee annually and their pensions are used as daily living cost.

Future: Ms. Cheng (2012) introduced that from 2007 to 2009, seldom people had interest to this community. However, the situation has been better and better and now about 850 residents live in it. Cherish-Yearn has developed on other three projects for the elderly in mainland China and they are looking forward to the brilliant future of senior livings in China.

6. Results and analysis

Kinds of elderly living in Sweden and China are similar. Existing drawbacks of most elderly livings in China involve limited amount of housings and beds for elderly, low quality facilities and environments, though separate case, Cherish-Yearn in Shanghai performances well. Besides, people in China are still keeping traditional ideas that elderly livings are the places for nursing care, recovering and "for the people be abandoned". These ideas mainly come from the impression of existing common low level elderly living situation there. Cherish-Yearn case illustrates aged in China have the potential to accept

independent senior livings with advanced environment, service and nursing care when they have enough economic conditions. Sweden's good performance of elderly living is established through an almost perfect social security system, but China's situation decides support from other aspects such as property organizations. Individuals have to develop together with government to face the largest aging society in the world.

7. Discussion

This study is intended to introduce aging living situations both in Sweden and China and explore implications from Sweden to China. It is impossible to transfer Sweden's mode to China directly because of the differences of developing levels of society, aging finance, culture and custom.

Location of elderly living: In Sweden, many elderly livings are located closed to the city center so as to make aged take transportation conveniently, while existing elderly livings in China are built and planned far from town. This is due to the density of population in main cities in Sweden being much lower than that in China. Stockholm has 5,400 square kilometers and 0.78 million people, while Beijing has 16,000 square kilometers and 20 million people. Elderly living requires low building density and better environment but with lower price than other kinds residential. It is understandable for China to locate elderly livings in suburb. Supportive transportation of elderly living should be arranged, such as regular shuttles to city center or nearest subway stations to promise old-age pensioners can go to town and back easily.

Finance: "The design of housing for the elderly is not only generally regarded by architects...The template of global society have been and continue to be museums of different... and powerful financial institution." (Feddersen and Lüdtke, 2009) Sweden has already owned mature pension system for many decades and the high tax support high welfare of society security system. Comparing to Sweden, China is facing "aging before wealthy", aging living issue cannot depend on government alone, while amount of elderly is large, increasing speed is fast and society security system basis is weak. House-for-pension program is tried in some cities in China. Though many facts go against, such as limited 70 years property right for individuals, traditional ideas that elderly would like to deliver housing to their children, etc., aging care by many ways is recognized as solution of the aging finance issue. Cherish-Yearn is evaluated as a successful elderly living project example in mainland China. However, the fact that high cost, no matter deposit (440,000 RMB at least) or annual fee (35,000 RMB) only fit to some rich people who just occupies a tiny percentage of the whole amount (Shanghai's average pension is about 1,500 RMB per month). Knowledge and experiences can be learned from Cherish-Yearn and be used in developed some lower cost and price elderly livings so as to satisfy more elderly's existing needs in China.

Labors: According to the Swedish National Board of Health and Welfare 2008, about 10% of the total cost for elderly is for building, equipment and furniture, while 90% is for labors. (Paulsson, 2011) As caring for elderly needs a great number of labors for servicing and nursery, lower labor cost in China benefits to reduce cost for aged caring, no matter government or domestic. Special institutions for aging service and nursery education should be set up and provide skilled people to work.

Previous experience: Research from Wikström (2010) shows that many aged in elderly living have the

sense of “being forced” as many elderly did not have enough time to prepare themselves to moving to a new living situation. Only 50% had visited the housing unit before moving in. (Wikström, 2010) Hotel in Chirsh-Yearn which has same units and facilities as other buildings the community provides a chance for the retired people to live and experience before deciding to move in. Besides, “Time bank” which encourages self-helping aged to help unself-helping people in nursing home of the community is a good idea as it provides a chance for the self-helping elderly to see and adjust their future in advance that moderate their fears when they enter the last part of their life. These approaches benefit elderly have good adaption when environment is changed. Aim of letting aged to live in the elderly livings should be “It was their wish to move to the new living situation” but not “be forced” or “be abandoned”.

Understanding of “living at home”: With low population density and better financial situation, elderl can live in an ordinary housing but with accessibility facilities and service and nursing support. However, as many existing buildings in China are lacking accessibility design, it is hard to improve some of them, such as elevator, living at home for elderly in China can be understood as living in nursery of the aged in the same community with their homes, or moving to a new home which has better condition.

Participation: “Most of the daily life of old people is spent at home” (Alan and Crow, 1989) and neighborhood environment. (Haak, 2002) Participation in activities with peer neighbors is important for the elderly’s life. Common areas in architecture, such as coffee shop, canteen provide space, while some clubs, such as cooking club, dancing club provides activities for aged to participate and communicate to each other. Cherish-Yearn has 29 entertainment clubs for elderly, some of them are made by elderly themselves. Mr. Li mentioned he is always busy in taking part in the clubs and felt life is full.

Advanced Swedish knowledge and experiences can be referenced in projects of China. *Integration:* elderly living is not only individual rooms for retired people to live, but also provide an integrated environment, which includes communication space such as coffee shop, retails or activity rooms for people to meet peers. Community center activities and services are readily available to elderly residents and services are often shared between residents and community members at large. (Lee et al., 2007) *Homelike environment:* Swedish elderly care home is keeping the facility appearance as homelike as possible. They use color, materials and facilities carefully so as to create a good circumstance for elderly internally and externally. This solution benefits elderly to be used to the now living place and homesickness if they have to move to the new place for a long time or forever. *Accessibility to nature:* The courtyard is a well developed concept in designing living for elderly. Accessibility to nature is well developed through wheelchair ramps, handrails and other supportive devices eliminating potential obstacles. (Lee et al., 2007)

8. Conclusion

In Sweden and China, types of elderly living are similar and the main approach (living at home as long as possible) for elderly living officially and culturally is the same. With different levels of society old-age security supports and years of aging development, implement in related aspects: environment, buildings, facilities, accessibility, service and health care in Sweden is much better comparatively and

can be as examples for China's development.

9. Summary

Main summaries of this paper are:

- China today is an aging society and will meet more serious aging problem in the immediate future, while aging development there is backward.
- Staying at home, senior living, secure living and nursing homes are main types of elderly living in Sweden, which is similar to the situation of China (community renovation, house for aged, apartment for aged and home for aged).
- Policy and culture encourage older to live at their own houses as long as possible both in Sweden and China.
- Senior living is a considerable type of living for elderly in the two countries.
- Different background and situation decide elderly living to be developed in different of: location, financial support, labor (service and nursery), understanding of living at home.
- Low price of labors benefits China's aging issues as service and nursing care for elderly need a large amount of labor.
- Previous experience and participation are encouraged both of the two countries.
- Other metrics from Sweden are introduced: integration, homelike environment, accessibility to nature.

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