RECONNECT GENERATIONS: INTERGENERATIONAL HOUSING

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Abstract

Reconnect Generations: Intergenerational Housing

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Historically, senior housing facilities have separated seniors from other generations and created large complexes that are disconnected from city neighborhoods. This age segregated environment not only impacts the wellbeing of seniors but also negatively affects the lives of younger generations. Because individuals of different ages do not occupy the same space, seniors, children, and young adults do not have opportunities to understand and learn from other generations. Senior housing needs strategies to create more intergenerational relationships and blend into the broader community.

As an alternative to senior housing, this thesis proposes mixed-use, intergenerational housing that brings people of different ages together, promotes a sense of place, and strengthens community ties. To achieve these goals, it analyzes these issues in three different scales: people, buildings, and the urban context. As for people, this thesis explores mutigenerational housing, shared spaces, and the balance between public and private spaces to encourage interaction among people of different ages. As for buildings, the idea of fine urban grain is examined to create homelike environments and pedestrian walkability. And, to connect to its surrounding urban context, open spaces such as alleyways and third places are researched.
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Reconnect Generations:
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1: Problem

People: Separation of Generations

Seniors

Young Adults

Children

Reciprocal Benefit of Intergenerational Interaction

Building and Urban Context: Senior Housing

Thesis Overview
1: Problem

Historically, senior housing facilities have separated seniors from other generations and created large complexes that are disconnected from city neighborhoods. In senior housing, seniors have limited opportunities for meaningful interaction with younger generations. This age segregated environment not only impacts the wellbeing of seniors but also negatively affects the lives of younger generations. Because individuals of different ages do not occupy or interact in the same space, seniors, children, and young adults do not have opportunity to understand, help, and learn from other generations. Senior housing also ignores cultural sensitivities. Some ethnic communities are familiar with living under a multigenerational roof that includes households with grandparents for financial and emotional reasons. Often, senior housing is created to house a large number of people. Large buildings reduce walkability and destroy the diversity of uses. This senior housing is only concerned about the safety of seniors, but not about the neighboring area. It does not have adequate open spaces and streetscapes for its residents and local community members to socialize. Senior housing needs to find strategies to create more intergenerational relationships and blend in its urban surroundings.
People: Separation of Generations

Older and younger generations have different experiences, expectations, and views on life. These differences make each generation unique, and, at the same time, may create generational gaps. These gaps create mistrust and prejudice between generations and deprive people of opportunities to learn from those who are younger and older than them.¹ These generational gaps can worsen by age segregation. According to sociologist Gunhild Hagestad, people are separated by different ages due to institutional, spatial, and cultural reasons. Institutional and Spatial age segregations occur “when individuals of different ages do not occupy or interact in the same space.”² As they do not share the same spaces, they do not have enough chances to know each other. As the classic extended family declines and the nuclear family emerges, the amount of interaction between generations has decreased significantly, which disconnects children and seniors and creates emotional separation between the generations. The cultural aspect of age segregation involves differences in lifestyles and preferences, which leads to desire for private spaces and results in a lack of understanding of other generational needs.³

Figure 5: Separation of Generations
I live in a gated senior community with all the amenities one could dream of; workshops, handicrafts, exercise, etc., you name it we have it. . . . And yet I am longing, to walk to the corner coffee shop, to hear the sound of children playing, dogs barking. I want to eat at the corner café, see young people in love, walk to the library, catch the BART [Bay Area Rapid Transit] into the city, and watch mothers with their children in the park, young families.

Seniors

Seniors of today are different from their parents’ generation and, accordingly, have different preferences. Many feel they are younger, healthier, and more active than seniors were in the past. Many seniors want to maintain an active lifestyle and engage in the community as members of society. Americans over the age of 65 volunteer more than any other segment of the population and are often the most reliable, committed volunteers who contribute more to society. They achieve satisfaction and self-esteem from these interactions and volunteer opportunities. For many active seniors, traditional senior housing that lacks a diverse population of ages may not be their first choice.

Over the past fifty years, senior housing facilities have often been removed from city neighborhoods, placed in the suburban outskirts or created as large buildings that are usually organized around recreational facilities. This prevents interaction between residents of senior housing and the broader surrounding community. In some age-segregated senior communities, young people and children who are daughters, sons, or grandchildren of residents are not welcome to live. Many developers of retirement communities understand that the idea of a gated community does not go over well with young seniors who favor a community-driven lifestyle.
Young Adults

Today’s young adults are busy balancing home and work. Especially, childcare becomes overwhelming for them financially and psychologically. Because single-parents and dual earner parents are too busy, they simply do not have enough time to give their children enough attention. Unfortunately, according to the Child Care Aware of America and U.S. Census Bureau report, child care costs have almost doubled in the last quarter century. Washington is rated sixth in list of least affordable states for infant care, 10th for four-year-old care, and 12th for single mothers raising children due to an increase in the cost of childcare.

These conflicts between work demand and family demand increase the level of stress, which may result in decreased work satisfaction, absenteeism, and burnout. Prolonged stress at work may make parents to withdraw from interacting with their children at home, or exacerbate conflicts with their children. To minimize the stress in childcare and enjoy healthy parenting, it is necessary to ask friends or family members for help.
Children

If children have contact only with friends their own age, they lose the chance to learn cultural values established by older generations such as grandparents and non-kin adults and opportunities to look at the fuller view of the world of adults. Without adults or seniors as cultural or moral guides, children are sent to unknown “islands” and not integrated in the surrounding communities. Children are more likely to spend time without parental supervision while parents are at work, which may affect the children’s performance in school negatively and get involved in unhealthy relationships. Parents are very concerned about who should take care of their children while they are at work. According to a study, parents chose grandparents as the best alternative when mothers were not available. This decision is based on the belief that grandparents care for the wellbeing of grandchildren. In addition to relationships with grandparents, non-family adults have significant influences on children. According to Generation United, young children who interacted with older adults in shared facilities achieved higher personal and social development by 11 months compared to other children in non-intergenerational facilities.
Reciprocal Benefit of Intergenerational Interaction

As classic extended families decline, the amount of interaction between generations has decreased. Rather than solely depending on family, providing opportunities for stable intergenerational relationships between non-family members can be an alternative option.21 Seniors’ involvement in the community not only vitalizes them but also directly benefits community members, especially children. One of volunteer opportunities that seniors can enjoy is involvement in childcare. Seniors’ helping hands for childcare may lower childcare expenses and allow young adults time to rest and relieve the stress of parenting. They can be mentors who give moral support to young adults and a sense of stability and comfort to children. In return, young adults may assist seniors with chores such as grocery shopping, driving, and pet care. Young adults or children also can teach modern technologies such as computer skills to seniors. The learning in shared spaces is not a one-way communication but a reciprocal process.22 These reciprocal learning activities promote healthy aging. Everyone—seniors, young adults, and children—benefits from mutual learning and sharing flow in many ways. Intergenerational engagements have extensive positive effects not only for individuals, but also for the community as a whole.
Building and Urban Context: Senior Housing

Traditionally, senior care has been the responsibility of family members.23 Over the years, government became gradually involved in senior care.24 In the early 19th century, governments in Europe and North America were committed to provide food and shelter for seniors.25 Workhouses/poorhouses were built for seniors who had no family to take care of them. Although the housing came out of a concern for humanity, their conditions were very bad.26 With government funding during the 1960s, nursing home became one of the most heavily regulated types of business in the United States.27 In nursing homes, safety took priority over individual’s wellbeing.28 The architecture of this type of housing reflected the government policy and had a prison-like atmosphere.29 As a result, nursing homes were considered fearful places.30 Eventually, the industry recognized that aging is not a singular condition and each person experiences aging differently.31 This led to an alternative housing approach such as smaller congregate housing and continuing care retirement communities (CCRC). Congregate housing had various models such as assisted living, independent living and supportive housing, which were not a nursing home or medical facility.32 Continuing care retirement communities (CCRC) were large campuses with either one story apartments or high-rise buildings. They had all kinds of amenities for seniors. However, they were self-contained village apart from the surrounding community.33
Thesis Overview

As an alternative to senior housing, this thesis will look at an integrated housing option that brings people of different ages together, promotes a sense of place, and strengthens community ties. To achieve these goals, it will analyze these issues at three different scales: people, buildings, and the urban context. As for people, this thesis will explore multigenerational housing, shared spaces, and the balance between public and private spaces to encourage interaction among people of different generations. As for buildings, the idea of fine urban grain will be examined to resolve the negative aspects of large buildings and to create homelike environments and pedestrian walkability. And, to connect to its surrounding urban context, open spaces such as alleyways and third places will be researched.
Notes:

1 Neal Peirce, "The Value of Multigenerational Cities." *Seattle Times*, January 26, 2013, Accessed May 6, 2015,
3 Ibid., 642-643.
8 Ibid., 530.
10 Ibid., 266.
17 Ibid., 208.
18 Ibid., 208.
21 Hagestad, Gunhild, and Peter Uhlenberg, 2006, "Should We Be Concerned About Age Segregation?", 650.


Scott M. Ball, *Livable Communities for Aging Populations Urban Design for Longevity*, 133.


Ibid., 552-554.

Scott M. Ball, *Livable Communities for Aging Populations Urban Design for Longevity*, 133.

Ibid., 133.

Ibid., 133.

Ibid., 133.

Ibid., 135.

Ibid., 137.

Ibid., 637.
2: Theoretical Framework

People: Integrate All Generations
  Multigenerational Housing
  Shared Spaces for Intergenerational Interaction
  Balancing Public Space and Private Space: Semi-Private Spaces

Building: Achieve Fine Urban Grain
  Fine Urban Grain

Urban Context: Connection to Urban Context
  Open Spaces
  Alleyways
  Third Place

Case Studies
2: Theoretical Framework

People: Integrate All Generations

Multigenerational Housing

Multigenerational families consist of more than two generations living under the same roof or include households with a grandparent and at least one other generation. Some ethnic groups such as Asians, Hispanics and African are used to a traditional multigenerational family structure. These ethnic groups place an exceptionally high value on family, respect the grandparents' role, and convey a sense of obligation to extended family members. These ethnic grandparents play an important role in the care of grandchildren.

Recently, an interest in multigenerational living has risen even in middle class populations. As childcare and adult care expenses go up, some young adults decide to live with their parents to receive childcare assistance or baby boomer generations choose to live with their ailing elderly parents rather than sending them to nursing homes. Along with financial benefits, multigenerational living improves emotional wellbeing of all generations involved. Today’s estranged old and young generations are interested in the gaps in multigenerational living environment to pursue their mutual benefits of this form of living.
Unfortunately most American housing is not appropriate to accommodate multifamily living. Most housing is designed to house a nuclear family. Its spatial design may not be efficient enough to make the clear distinction between separate and shared spaces in each unit, which is critical in multigenerational living.

To make multigenerational living function successfully, the design requires reducing conflict between family members, which encourages harmony and creates a feeling of home. According Kenneth Parker, five key factors affect the reduction of conflict in a dwelling: crowding, personal independence, level of privacy, territorial issues, and personal and private space. It needs to be designed for seniors to live independently without relying on other family members. Privacy is important for the self esteem of family members. Each family member needs their own territories to avoid conflicts. To achieve these purposes, a multigenerational home needs shared spaces for family time together, but also needs to define personal boundaries and personal spaces.

Figure 12: Increase of Multigenerational Families
Shared Spaces for Intergenerational Interaction

Shared spaces such as intergenerational centers, shared kitchens, gardens, and meeting rooms can be places to reconnect different generations. Social proximity plays a critical role in interpersonal relationships. In shared meeting rooms, residents of all ages can engage in leadership roles. These strategies help offset the negative effects of age segregation and build trust and connection across generations.

A shared kitchen can be a hub for social contact and a space for culinary classes. Edible food gardens foster interaction among seniors, young adults, and children by teaching about the nutrition and source of food. According to a heart and brain wave study, when participating in growing food and horticultural therapy, the stress, anxiety and health problems of participants were improved. In community gardens, residents share everything from food to gardening tools. Both the reciprocity and feelings of shared responsibility are important for promoting cooperation among generations. Healthy food fairs, farmer's markets and barbecues are examples of activities that can be held in community gardens to provide opportunities for intergenerational interaction.
Mostly, these shared facilities are limited to the exclusive use of residents. In some occasions such as cooking lessons, inviting local residents may increase integration with the local communities. The feeling of loneliness is associated with a small social network and depression is related to little activity participations and limited personal acquaintances. Opening the social network beyond the residential community may have positive effects on all community members.
Older folks often choose to be with kids, but only when they want to. They need a place of refuge so that interaction is an option and not forced upon them.45

Balancing Public Space and Private Space: Semi-Private Spaces

For interactions to occur between members of younger and older generations or between members of the same generation, a balance of public and private spaces is important. Public spaces play a vital role in the social life of communities. Public spaces include outdoor spaces such as streets, street markets, gardens and playgrounds, and indoor public spaces such as shopping centers and

Figure 17: Example of Semi-Private Space
community centers. By fostering interactions, ”public places help reverse isolation.”46 The benefits of public spaces include improving physical and mental health: the younger generation’s obesity problems and older generation’s chronic disease such as diabetes and depression.47

Along with needs of public spaces to interact, all the generations need private places of their own. Especially, privacy is important for an older person’s sense of wellbeing. “Homelike” private spaces help seniors to adapt to new environments and maintain their lifestyle. Individuals try to achieve best possible levels of privacy.48 When individuals achieve too much privacy, they feel isolated.49 In neighborhoods tensions may arise due to different lifestyles and interests.

To reduce tensions, seniors, children and young adults need boundaries and semi-private spaces located in between private and public places.50 Boundaries of semi-private spaces can be defined through hard or soft edges. Hard edges are clear divisions of public and private elements such as solid walls, gates or fences.51 Soft edges are created with small bushes, recessed entries, and porches.52 Semi-

Figure 18: Semi-Private Space Diagram

Figure 19: Semi-Private Space Diagram
private areas play another role of motivating people in private spaces to go out and engage in activities in public places frequently. Successful semi-private areas involve easy access, nice waiting area near the entrance and interesting activities to do in front of the building.
Building: Achieve Fine Urban Grain

Fine Urban Grain

Over the past several decades, senior housing has become massive. Often, it takes over an entire block. “Continuous building facades ... lack variety and rich sensory experiences.”\textsuperscript{56} Although many cities have design standards that require facades of large structures articulated and modified by using various architectural features, these design requirements only affect the skin of building. Instead of superficial façade articulation, substantial changes in building forms are necessary. Large buildings reduce walkability and destroy the diversity of uses. According to Jane Jacobs, “the enormous collections of small elements” contribute to a lively city.\textsuperscript{57}

The diversity of building forms can be achieved by fine urban grain. Amos Rapoport says that “urban grain is a matter of solids and voids, the relationships of buildings and spaces, the patterning of streets.”\textsuperscript{58} Successful buildings and neighborhoods are linked to fine grain. According to Kathryn Merlino, “fine grain streets have a high diversity of small and medium building widths” and provide “many points of exchange between inside and outside”.\textsuperscript{59} Breaking down a large, monolithic building into multiple smaller buildings results in creating plenty of open spaces and alleyways. This design strategy

Figure 21: Fine Urban Grain Diagram
enhances social interaction and urban connection by creating vitality and walkability. Unlike large buildings, small buildings create more homelike environments that provide softness, stability, and security to their users, which satisfy human scale. Human scale refers to a size, texture, and articulation of physical elements that match the size and proportions of humans.\textsuperscript{60}

Carving spaces out of a large mass enables the creation of open space, walkways and small community spaces. Small community spaces create semi-private settings where frequent informal small meetings can take place. By making buildings or building spaces "too big, too empty, too distance and untouchable", places become isolated and inhospitable.\textsuperscript{61} Too large or too small communities are not successful in providing social interaction. If communities are too large, residents do not know each other. Residents of small communities suffer from lack of the privacy. In large communities, clustering strategy can increase social interactions and the security needs of residents.\textsuperscript{62} It is necessary to ensure that clusters are built around the central communal facility.\textsuperscript{63}
Urban Context: Connection to Urban Context

Satisfaction can be found in the tangible transformation of a site, the productivity of cultivation and the resulting nutrition, the fulfillment of community open space needs, meeting neighbors and working together, and fostering a more sustainable and healthy community.64

Open Spaces

Open spaces in neighborhoods allow spontaneous meetings and informal encounters with people.65 The spaces improve physical, social, and mental wellbeing of people. Open spaces include places such as courtyards, streets, and alleyways, gardens, and playgrounds.66 Successful open spaces have the characteristics of conviviality and integration.67 These characteristics of open spaces are a safe and welcoming environment, which allow people to keep visiting and gathering.68 A relaxed atmosphere and playful mood of open spaces attracts all the generations.69 Examples of open spaces that reveal the ideas of conviviality are gardens and playgrounds. The characteristics of integration combine diverse age people together and allowing them to stimulate and inspire one another through diverse activities. Open spaces connect whole neighborhoods through welcoming environments and the integration of diverse aged people.
Alleyways

For urban alleyways, US cities often overlooked alleyways and associated them with crime, darkness and garbage. However, alleyways have great potential for understanding the organization of the existing urban scale. In some Asian countries, alleys are pedestrian ways where people work and play. These alleyways are naturally disposed to a variety of uses such as strolling, socializing and bicycling. Enterprises such as small manufacturing, service businesses, galleries, or auto workshops are intermingled with dwellings. These inclusive features are key ingredients to diversity currently lacking in many city plans in the United States.

Urban alleyways in United States are being converted to places with pedestrian friendly designs, green environments, and increased safety. These spaces adjoining stores, offices, and residential complexes offer residents a convenient shopping experience, create opportunities for unplanned encounters among all generations, and attract people of larger communities to interact. These conversions are taking place in commercial and mixed-use districts and in residential neighborhoods of many US cities. Projects in Santa Cruz and Fullerton, CA, have redesigned downtown alleys into more pedestrian-friendly spaces adjoining restaurants, retail shops, offices, and residential complexes. The alley project includes permeable surfaces, native plant strips, off-the-grid lighting, and a bikeway and walkway.70
The alleyways are organized into three groups: single family residential alleyways, low density commercial alleyways and high density commercial alleyways. Residential Alleyways are located near one to two story single family housing. They serve as a backyard for residents to express themselves through landscaping. Low density commercial alleyways are next to low and medium size commercial buildings. They are used for temporary activities such as art walks and music festivals. High density commercial alleyways serve as commercial pedestrian streets.
Third Place

According to Ray Oldenburg, a third place is a welcoming, friendly, and informal place where rich and informal social interactions take place. By this definition, home is a first place and work is a second place. The third places are spaces where people enhance the sense of community in relaxed environments.

The third places such as green grocers, ice cream shops, bookstores, and restaurants added to a mixed-use residence integrate residents and local community members by providing spontaneous encounters and creating more pedestrian activities. These pedestrian-friendly developments can increase the physical activities of a broad range of community residents. Stores in mix-used development are important for community members, particularly for older people and children because they are located within walking distance. As people age, they depend more on neighborhood resources because, like children, their social activities occur more in their neighborhood contexts due to their physical limitations and diminished driving abilities. Security, social cohesion and a sense of belonging within neighborhoods might become vital elements for both children and older people.
Case Studies

The case studies are divided into two sections. One section shows the examples of intergenerational housing on the west coast of the United States. The other section shows the examples of intergenerational housing in Europe. Even though, housing in the United States is different from that in Europe, the case studies in Europe can reveal future trends in senior housing design.
Bridge Meadows

Bridge Meadows is an intergenerational housing community located in Portland, Oregon. It is a home for elders and families with foster children and is run by a nonprofit organization. Built in 2011, it is only one of three residential buildings in the nation to combine these specific populations. The community is designed to provide a permanent residence, community, and caring relationship for foster children and adoptive families, and a safe and meaningful purpose for seniors.

The housing for elders and foster children rely on shared spaces such as an intergenerational center, community gardens, and library to bring community members together. The seniors act as surrogate grandparents and mentors to the children and families who live there. In the intergenerational center, seniors volunteer at least 11 hours per week working with children. They engage in activities such as teaching arts and crafts, providing music lessons, and conducting story hours. The
The intergenerational center and library are built with wood and polished concrete to create warm, permanent, and flexible multiple purpose spaces.

Apartments are built around the central courtyard, paved area, and walkways in green landscape that host a variety of activities and community gatherings, which creates frequent encounters among residents and leads to meaningful social interaction between generations. The community adopted innovative green design strategies such as community gardens, bioswales for rainwater, solar hot water panels, and radiant heat systems for senior units. In addition, materials for the paved area and walkway contain low levels of volatile organic component. The community also has bicycle parking; it was awarded LEED Gold Certification and was selected as winner of the Eisner Prize for Intergenerational Excellence. According to the Eisner Foundation, the purpose of the Eisner Prize is to recognize excellence in connecting and bonding multiple generations, especially seniors and youth, to promote useful and long-lasting changes in their community.
201 Turk and 111 Jones

The project is two high rise affordable intergenerational residential buildings located adjacent to each other at 201 Turk Street and 111 Jones Street in San Francisco, California. The buildings and courtyard were designed at the same time. The main goal of the courtyard located behind the two tall buildings was to create a safe play space for children of immigrant families and a place for interaction between generations. The courtyard provides a play area for children and relaxation place for seniors. The childcare facility also uses the space. Architects placed larger family units on the second, third, and fourth floors to overlook the courtyard and supervise children playing in the courtyard. Elderly residents live in smaller units on the upper floors.77 78 79
Moldaw Family Residence at the Taube Koret Campus

Located in Palo Alto, CA, Taube Koret Campus Jewish Life is an 8.5-acre multigenerational campus that consists of senior residence and community center with a variety of facilities such as fitness facilities, a theater, preschool and classrooms. It was designed to inspire older people to remain active and to connect and share knowledge with younger generations. The design encourages unplanned intergenerational encounters and family visitation by organizing the buildings around a central pedestrian walkway, multiple outdoor communal spaces, and courtyards. The campus provides an architecturally dynamic environment for both young and old with non-traditional pathways, modern building shapes and pedestrian-friendly design\textsuperscript{80}. The architect mentions "how outdoor spaces that were orthogonal rather than rectilinear and intersections were designed to be friendly with lots of nooks and crannies filled with benches and oversized planters to facilitate connections. And where older generations have the opportunity to be in the thick of things." \textsuperscript{81}
**Chophouse Row**

Located in the Pike-Pine neighborhood, Chophouse Row is adaptive reuse of the historic Chophouse building that was built as an auto parts store in 1924 and used as an iconic band practice space. The project contains loft office spaces, retail marketplace and residential penthouses. The main design concepts are a pedestrian alley and mid-block plaza that connect the Chophouse Row through to Dunn & Hobbes’ other 12th Avenue Marketplace properties. The project combines the historic Chophouse building with a new steel and concrete office tower that features open plan workspaces with floor to ceiling windows and exposed steel structure. Some office floors feature dramatic double-height spaces with mezzanines. One of the most interesting aspects of the development is the new pedestrian alleyway that connects 11th Avenue at the front of the building to the plaza. It contains the shops and restaurants.

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Im Der Wiesen Generation Housing

The project is located in Vienna, Austria. The project contains a variety of units such as thirty handicap-accessible units for seniors and twelve mini-lofts for young people, six family maisonettes and thirty nine apartments. The project contains an open plaza and a semi public courtyard. The central courtyard serves an important space to bring in all ages and types of people. It serves as a neighborhood focal point and connects local neighbors by providing public spaces, shops, an assisted living office, and a medical facility with the surrounding neighborhood. The medical facility connects public and semi public spaces. Local neighbors and residents can share the facilities for medical care and exercise classes.

Figure 34: View of Courtyard

Figure 35: View of Exterior Corridors
Steinacker Residential Complex

Located in Zurich-Witikon, Switzerland, housing complex is designed for users going through entire life cycle such as family with children, couples, singles and the elderly. Each apartment complex has four units arranged around a central stair case. The floor plan allows flexible and changing of spaces. Two apartment units can be combined to form a large unit depending on the situation. The complex contains a children's nursery and elder residential nursing care. The elder care group can house about six people. All units and entries are barrier free and accessible for wheel chairs. The outside landscape site was designed with organic pathways that connect to the streets. It creates shared outdoor space between daycare and assisted care group. One of disadvantage is having the five separate building from each other. This creates disconnection between the residents and may cause more isolation.
Summary of the Theoretical Framework

To accommodate three generations—seniors, children, and young adults—this thesis proposes mixed-use, intergenerational housing as a possible housing option. Intergenerational housing is integrated living for multiple age groups. The proposed housing will address the needs of three generations by focusing on housing, the necessity of shared spaces, and the importance of semi-private spaces. For some people, especially some ethnic people, who want to live with extended family, multigenerational living will benefit them financially and emotionally. Shared spaces can help building knowledge and relationships. Semi-private spaces existing between public spaces and private spaces are places where frequent socialization takes place. Breaking down a large mass into smaller parts creates plenty of open spaces and walkways/streetscapes/alleyways, which create fine urban grain and urban connection.
Notes:

38 Ibid., 94.
39 Ibid., 96.
40 Ibid., 97.
43 Ibid., 76.
46 Ibid., 26.
49 Ibid., 15.
56 Kathryn Rogers Merlino, "Urban grain and the vibrancy of older neighborhoods: metrics and measures", Considering research: reflecting upon current themes in architectural research, 2011, Southfield, MI: Lawrence Technological University, accessed November 11, 2015, 480.


59 Kathryn Rogers Merlino, "Urban grain and the vibrancy of older neighborhoods: metrics and measures", 480.


63 Ibid., 213.


66 Ibid., 51, 260- 271.


68 Ibid., 115.

69 Ray Oldenburg, The Great Good Place : Cafés, Coffee Shops, Bookstores, Bars, Hair Salons, and Other Hangouts at the Heart of a Community, New York : [Berkeley, Calif.]: Marlowe ; Distributed by Publishers Group West, 1999, 22.


71 Ray Oldenburg, The Great Good Place : Cafés, Coffee Shops, Bookstores, Bars, Hair Salons, and Other Hangouts at the Heart of a Community, 38.


73 Ibid., 115.

74 Manuel Pastor and Rachel Morello-Frosch, "Integrating Public Health and Community Development to Tackle Neighborhood Distress and Promote Well-being," Health Affairs (Project Hope) 33, no. 11 (2014): 1891.

79 "201 Turk and 111 Jones".
3: Methodology

Goal and Objectives
Site Location
Program

Figure 38: Alternative to Senior Housing
3: Methodology

Goal and Objectives

The following chapter will identify the goal, methodology, and site placement of intergenerational housing. Similar to the previous two chapters, the goal and objectives of the thesis are organized in three categories: people, building and urban context.

People:

1. Creates residential Units that
   1. accommodate multigenerational families.
   2. provide a variety of units for a diverse mixture of users.
   3. define personal boundaries for each residential unit.
   4. provide semi-private spaces to balance public and private spaces.

2. Create Communal Spaces/shared spaces that
   1. stimulate social interaction among senior, children, and young adults.
   2. create intimate spaces for small scale meetings for residents
   3. provide social proximity
   4. improve emotional, psychological, and social wellbeing of residents.
   5. foster the notions of choice and independence.
**Building:**

1. Break down the building form into multiple smaller buildings to create a sense of home and pedestrian walkability.
2. Carving out spaces will result in open spaces and alleyways. The buildings will be connected by communal spaces.
3. Pursue fine urban grain design to increase visual communication between inside and outside the buildings.

**Urban Context**

1. Create housing community that contributes to existing neighborhoods.
2. Provide open space, walkways, and alleyways that link to important facilities in the neighborhoods.
Site Location

The site selected for the proposed project is located in Columbia City within Rainier Valley, five miles southeast of Downtown Seattle, past I-90. The site was selected due to demographics, culture, and mobility. Compared to other areas of Seattle, Columbia City has the highest concentration of both elders and families. Columbia City has programs that emphasize the importance of passing down legacy and information from generation to generation. Therefore, it can be an ideal location to build mixed-use intergenerational housing. Columbia City neighborhood is an area with diverse ethnic populations. Its population consists of a third Asian, a third African American, and a third white. Dozens of languages are spoken in this area and many of the residents are recent immigrants from Southeast Asia, East Africa, Eastern Europe, and Central America. Jim Diers said that "many regard this diversity as Columbia City’s greatest asset."
The zoning of the area is NC2-40. The NC2 zone is a moderately-sized pedestrian-oriented shopping area that provides a full range of retail sales and services to the surrounding neighborhood. It is bounded by 38th Avenue S. to the east, Rainier Avenue S. to the west and S. Alaska Street to the north. And, it is bounded by an apartment complex to the south. The site is located conveniently near the light rail and bus transportations along Rainier Avenue S. The site is within walking distance of amenities in Columbia City such as retail shops, restaurants, schools, cultural centers, entertainment facilities, and parks. There is a movement in Rainier Valley to improve the safety of Rainier Avenue South. Let's Move Seattle Movement is implementing a new rapid ride and corridor in Rainier Avenue that transports people from Rainier Beach to Columbia city to downtown. As of September 2015, a neighborhood green way is planned along 38th Avenue.
Columbia city still has historical buildings that retain characteristics of the old mill town. It was designated a landmark district in 1978 that is managed by the Historic Preservation program of the Department of Neighborhoods. However, the neighborhood was in decline in the 1970s. Businesses closed, and only taverns survived. The declining of the district continued until the 1990s. In the middle of the 1990s, the residents began to be involved in revitalizing the business district of the city with the help of city officials and professionals. They were successful in promoting multiple projects. The Columbia City
Farmers’ Market has been a big success. The city has an annual garden tour and an annual barbecue cook-off. Columbia City has indeed been revitalized: longtime businesses are thriving and many new businesses have opened. Now, historical buildings and newly constructed buildings stand along side by side. The city, once poverty and crime stricken area, is being revitalized with new construction and a new diverse population. Single purpose commercial structures, multi-story mixed-use and residential structures are allowed. The height limit of the structure is 40 feet.

The three most important institutions in Columbia City are the Rainier Valley Cultural Center, the Rainier Community Center and the Columbia Center Library. The Rainier Valley Cultural Center is an organization that brings diverse music, dance, film and art on stages and concerts. According to its website, its mission is to produce and facilitate a variety of artistic and cultural productions supported by the community. The Rainier Community Center is the second largest community center in the state of Washington. The community center contains a gymnasium, computer labs, and rental facilities. The activities consist of programs for seniors and teens, indoor toddler playtime, late night recreation, family center, day camp, and sports.

Figure 46: Rainier Valley Cultural Center  
Taken at the Site  

Figure 47: Rainier Valley Library  
Taken at the Site
Site Observation

In the surrounding areas of the proposed site, many people were observed on the streets. In the summer, many people such as mothers with children, couples and individuals hang out at the Genesee Park to relax or eat lunch during the weekdays. Especially during the Seattle Seafair, the Genesee Park and streets were full of people who came out to enjoy the fair. In the community center that offers of diverse activities such as classes, ping pong, and basketball, many seniors, children, and teenagers were involved in sport activities. Every time I visited PCC Natural Markets, I saw the store was full of customers of all ages, which created lively atmosphere. The area looked lively, diverse, and energetic.
Figure 49: Survey Question:
Do you want to live in intergenerational housing?

Figure 50: Survey Question:
Do you think intergenerational housing would be a good thing in the neighborhood?

Survey

From July to August, anonymous surveys were handed out to 95 people living in the area surrounding the proposed site. The purpose of the survey is to ask their opinions on intergenerational housing and their satisfaction for current community spaces and retail stores. According to the survey, the majority of people agree that different ages living together would have positive aspects for Columbia City. Some suggested this housing has educational benefits for the community. Some people who had grandparents and children had better understanding on this housing.
concept. Some had mixed responses to the question whether they want to live in this type of housing or not. The reasons include: some are not old enough, some currently own houses, or some are satisfied with living in current condition.

As for the questions asking about the quality of current community spaces and retail spaces in their neighborhoods, they demonstrated a high level of satisfaction. One person commented that the community centers are the focal context of their neighborhoods. Some comments pointed out that retail stores lack varieties. Some missing spaces in the area included swimming pools, clothing stores, playgrounds, skating ring, and markets.

The survey also asked which neighborhood space they enjoyed most. The spaces that people most enjoyed were outside spaces such as outdoor courtyards (41 percent). About 28 percent of people were interested in roof deck. Social room and playground were next at 13 percent and nine percent respectively. Semi-enclosed courtyard, indoor courtyard, and shared kitchen received seven, six, or five percent each. For current living arrangement, most people live in apartments (41 percent) and 39 percent live in single family homes. Their hobbies were varied. They were interested in music, gardening, sports, cooking, and games.
**Program:**

The building program is grouped into three categories: private space, share space and public space.

**Private Space:** Private Space involve housing units for seniors, children, and young adults. Overall individual units will be designed to ensure privacy with little outside interference with by providing recessed entrances. Residential units have three options such as senior, single and family units. Senior and single units will have studio or one bedroom. The family units have two or three bedrooms. These units need to have proper natural lighting and views towards open spaces, alleyways, or streets. Some units have double height spaces that bring more light in and create a sense of space.

**Shared Space:** In various communal spaces, residents can engage in social and productive activities. These spaces includes educational rooms, laundry room, greenhouse, and meditation room. A laundry room is usually located in an isolated area, but in this project, it is located on each floor near a communal space. Residents engage in social interaction while doing their laundry. The greenhouse is a multilevel indoor space that allows production of fruit and vegetable all year-round. The meditation space is a place for privacy and healing. Similar to the meditation space, healing gardens are outdoor spaces that residents use when they have desires for privacy or a quiet moment. The community center, located at the center of the site, has a multipurpose space, shared kitchen, exercise room, and daycare.

**Public Space:** The public space includes retail stores, open spaces such as playground and alleyways that are open to broader community.
### Private Space:
- Studios: 500 SF
- 1 bedroom unit: 800 SF
- 2 bedroom unit: 1,200 SF
- 3 bedroom unit: 1,500 SF
**Total Private Space:** 131,400 SF

### Shared Space:
- Educational Spaces: 11,300 SF
- Meditation Space: 300 SF
- Greenhouse: 4,200 SF
- Laundry: 400 SF on each level
- Other: 7,000 SF
- Healing Garden: 1,000 SF
- Multipurpose Space: 3,000 SF
- Shared Kitchen: 1,000 SF
- Exercise Room: 940 SF
- Child Daycare: 700 SF
**Total Shared Space:** 31,040 SF

### Public Space:
- Café: 2,000 SF
- Bookstore: 3,500 SF
- Beauty Shop: 3,500 SF
- Restaurant: 10,000 SF
- Playground: 1,000 SF
**Total Public Space:** 20,000 SF

### Service Spaces:
- Parking: 33,000 SF
- Elev. Machine Room: 320 SF
- Mech/Elect: 3,500 SF
- Circulation: 20,900 SF
- Elevators/Stairs: 11,000 SF
- Lobby: 1,500 SF
- Nurses Office: 200 SF
- Storage Room: 4,200 SF
- Restroom: 300 SF
**Total Service Space:** 74,920 SF

**Total Building Square Footage:** 257,360 SF
**Delimit**

Age segregation has continued since the industrial era. This proposal focuses on creating intergenerational housing for seniors, children, and young adults. Intergenerational housing might not be a housing type for all elders. However, it is still a reasonable option for active elders. This thesis also will not consider the impact of gentrification, and changing and unpredictable characteristics of family household, and senior housing preferences. This proposal is not for all the seniors such as fragile seniors or severally ailing seniors.
Notes:

89 Ibid., 155-156.
91 Rainier Community Center (Seattle Parks & Recreation:)
http://www.seattle.gov/parks/centers/rainiercc.htm
92 Ibid.
93 anonymous surveys, Columbia City, August 10, 2015.
94 anonymous surveys, Columbia City, August 10, 2015.
4: Design

Urban Context: Connection to Urban Context

Building: Achieve Fine Urban Grain

People: Integrate All Generations
4: Design

The design tries to reflect the subjects discussed in the previous chapters. As for building and urban context, a series of small and large spaces are carved out from a large mass, which result in creating open courtyard, alleyways and intimate communal spaces. The individual aspect of the design focuses on incorporating shared spaces, multifamily units and semi-private spaces.
Figure 55: Connection Diagram
To achieve a fine urban grained design, pleasing appearance and improved pedestrian walkability, the facades have multiple solids and voids. The view shows how the building steps down from Rainier Avenue South, a busy commercial street, to 38th Avenue South and South Alaska, residential streets.
The added retail spaces integrate residents and local community members by providing spontaneous encounters. The stores are located on the ground level and are facing Rainier Ave S. These pedestrian-friendly developments can increase the physical activities of all community residents.
The shared community center is located at the center of the site for easy access. It contains shared kitchen, daycare, mediation room and exercise room. The community center opens up to a courtyard that has a playground. On the floor plan, the colors of the pavements reveal the degrees of privacy for each area. The public open space facing Rainier Ave S has brick pavement. The semi-private spaces such as residential alleyways have lighter colored pavement.
Figure 59: Floor Plan Second Level

Legend
1. Multi-Purpose
2. Meditation Room
3. Exercise Room
4. Nurse Office
5. Laundry Room
6. Storage
7. Open Corridor
8. Communal Space
9. Garden Space

Figure 60: Section A-A
Figure 61: Floor Plan 3rd Level

Legend
1. Garden Below
2. Roof Below
3. Storage
4. Open Below
5. Communal Space
6. Laundry Room

Figure 62: Section B-B
Figure 63: Floor Plan Fourth Level

Legend
1  Open Below
2  Storage
3  Communal Space
4  Laundry Room
Residential units have series of recessed porches that serve as semi-private spaces. Some units are accessible from the alleyways. The alleyways are lined up with landscaping features. At the end of the alleyway, the multistory communal spaces with tinted glass wall are visible. The glass walls of each communal space have different colors signifying its functions: the communal space across the laundry room, tinted yellow; the communal space across the meditation room, tinted purple; the communal space across the green house, tinted green. The building steps down toward the alleyways to allow light to enter.
Generally, senior units and family units are all spread out to encourage intergenerational interactions. But, for seniors who favor quieter units, some units are clustered together away from family units because some seniors want to be with children only when they want to.
Two-bedroom units are for families with smaller family members. Family units have diverse floor plans. A two story unit has its own rooftop garden and double-height space. The primary reason for adopting double-height was the expanse of space it creates in a limited space. It also allows cross ventilation and makes a space bright. Other units have a balcony.
Three bedroom units are for a large family, especially for multigenerational family. A three bedroom plan has a separate space for grandparents away from other family members because everybody need their own private boundaries.
Residential units are clustered around multiple communal spaces. Communal spaces are multilevel spaces and include educational spaces, meditation room, laundry room, and greenhouse.
A laundry room is usually located in an isolated area, but in this project, it is a communal space where residents engage in social interaction while doing their laundry. This room has sliding glass doors and walls to allow transparency and visibility. The space has outside view toward alleyways.
Older Generation and younger generation can learn about nutrition, healthy eating, and planting. It is a multilevel space with a skylight that allows lighting necessary for all year-round planting. The solid walls and floor of the greenhouse have earthy warm colors and textures to tune with nature.
This communal space is located across the meditation room. It is created to generate the feelings of calmness, spirituality, and warmth with dark toned walls and fireplace. The light purple tinted glass filters light.
5: Conclusion

This thesis started from criticisms of senior housing and its age segregation policy. The thesis examined these issues at three different scales: people, building, and the urban context. This thesis proposed an intergenerational housing option that argued against senior housing. Instead of separating seniors from other generations, it provided plenty of shared spaces and semipublic spaces to promote intergenerational interactions. As for buildings, the thesis tried to create more homelike environments by applying a fine urban grain approach rather than just building large complexes. For the urban context, the thesis examined open spaces such as alleyways and third places to integrate with a broad range of people in the community. An alleyway can give a sense of place for some ethnic communities because it plays an important role as a pedestrian passageway in other countries.

The proposed site, located in Columbia City, Rainier Valley, was chosen for its diversity and liveliness. Columbia City is famous for its ethnic and cultural diversity. Also, it is an area with a mix of early twentieth century architecture and new buildings. The area is a lively neighborhood filled with restaurants, and cafés, shops, and markets.
In the design of the intergenerational housing, the balance of private and public spaces is not fully resolved. Some units have two entrance doors unlike other typical apartments. No clear distinction between a front door and back door in a unit results in the possibility of offending privacy of its residents. The design focused more on creating unique communal spaces rather than creating residential units satisfying the needs of individual residents. Residential units could have been designed to meet the expectations of different cultures and family structures. Solving these issues may allow better transitions from private spaces to public spaces. In addition, further research may include the in-depth analysis of alleyways across the world and reflect them to the design of alleyways. However, cultural representation on design needs to be careful to avoid stereotypes. Although traditional senior housing can never be completely replaced, this thesis shows the potential of the diversified form of senior housing.
Survey

- Gender:
  - Male
  - Female

- Age Group:
  - Under 10
  - 10-19
  - 20-39
  - 30-39
  - 40-49
  - 50-54
  - 50-59
  - 60-69
  - 70-79
  - 80+

- What is your current living arrangement?
  - Apartment
  - Single Family House
  - Townhouse
  - Communal Living/Co-Housing
  - Senior Housing/Retirement Home
  - Assisted living

- How would you rate your interest in participating in following activities?
  - Music activities
  - Gardening
  - Exercise/Sports
  - Cooking
  - Playing game
  - Other Activities: Writhe, Bike Angels

- What kind of common space would you enjoy most?
  - Outdoor courtyard
  - Indoor courtyard
  - Semi-enclosed courtyard
  - Roof deck
  - Shared kitchen
  - Community social room
  - Playground
  - Other common space:

- Do you think intergenerational housing would be a good thing in the neighborhood?
  - Yes
  - No

- What might be some of the problems with living in intergenerational housing?

- How would you rate your community spaces (ex: library, community center, cultural center, etc.)?
  - 1 (lowest)
  - 2
  - 3
  - 4
  - 5 (highest)

- What are your favorite community spaces in the neighborhood (ex: library, community center, cultural center, etc.)? Why are you using it? What is missing?

- How would you rate the retail stores in the neighborhood?
  - 1 (lowest)
  - 2
  - 3
  - 4
  - 5 (highest)

- What kind of stores do you shop at in the neighborhood? What is missing?

Sample Survey
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