HOUSING FOR THE SILVER TSUANMI
ANALYSIS OF SENIOR LIVING OPPORTUNITY IN JAPAN, EUROPE & U.S.A

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- CREDITS & SOURCES
1. Iyashi: Japanese word that means to heal
2. CCRC: Continuing Care Retirement Communities
3. Mahjong: Japanese tile based game
4. Ofuro: Japanese specialty spa complex
5. Kaizen: change for better
6. Generational co-living: baby boomers with the younger generation
7. Gerontolesence: Considered a second adolescence. A time where one can reconsider their life trajectory and address possible changes to it.
8. Transect: Urban study of the different zones
9. Jikka: parents home
10. IL: Independent Living: When the seniors still maintain an active lifestyle
11. AL: Assisted Living: When the seniors require a certain amount of attention but can still attend to take care of themselves to a certain degree.
12. MC: Memory Care: When the seniors are in no state to take care of themselves due to the mental issues and medical problems they face such as demetia, Alzheimers, and more...
INTRODUCTION

BABY BOOMERS

STAGES OF CARE

Senior living is divided in three subcategories in term of design. The various types all include some type of care yet the levels vary. Independent living, assisted living, and Memory care form the scope of senior housing. “Baby Boomers are upsetting the spectrum of housing elderly residential models once again as they look for options for their parents as well as their vision for their own later life.” (Perkins, Hogund, Kin, & Cohen, 2003, 3)

AGE:

FERTILITY:

Senior living is divided in three subcategories in term of design. The various types all include some type of care yet the levels vary. Independent living, assisted living, and Memory care form the scope of senior housing. “Baby Boomers are upsetting the spectrum of housing elderly residential models once again as they look for options for their parents as well as their vision for their own later life.” (Perkins, Hogund, Kin, & Cohen, 2003, 3)

AGE:

Predictions about the future are always due to the constant change in society. Populations are growing, the average lifespan is increasing as well as the way people are living. These predictions of baby boomers are important because they help plan for possible problems and dramatic changes. Populations are changing due to the fact that people are living longer. Advances in healthcare have also improved lifespans, enabling the average retirement age to be pushed back. With the drop in birth rates and less children in society this leads to a new norm of an older community. By 2070, some people will are predicted to live up to 125 years old. By 2050, it is expected that 1 in every 6 people will be older than 60 years old. Therefore, by 2080, there will be a disproportionate number of older people verse the younger generation.

FERTILITY:

Current trends show a rapid decrease in fertility rates (children per woman) moving into 2080. There is a strong correlation to the development of a country. The more developed a country becomes, fewer children are born. In the future this may rapidly change as more women will be working, they will be working into later parts of their lives, and they will be in more demanding careers. Women are choosing to put their education and careers fi rst, before considering to start a family.

Overall these trends contributes to a smaller growth in the world population. Combined with lower death rates per year from people living longer, the level of world population may approach an equilibrium or possibly even begin to decrease.
There’s no way I’m moving into a nursing home. You’re going to have to shoot me first.”

The majority of the elderly population refuse to be placed in a nursing home. Senior housing especially in the United States is not a prominent market unlike other countries such as Japan, Germany, and other parts of Europe yet its starting to boom. There is a programmatic overlap between the early stages of life and the last stages such as they both acquire different levels of assistance as they grow. For kids they offer services such as daycare, parks, playgrounds and more yet additional services modeled for seniors would enable the hospitality to grow as a whole and offer services to all the age spectrum.

The global population aging is becoming one of the most important social transformations in the 21st century. The number of elderly people has boomed over the last few years worldwide. According to the United Nations (UN), the population is expected to increase by 56% by 2050. “Population ageing is unprecedented, without parallel in human history—and the twenty-first century will witness even more rapid ageing than did the century just past.” (United Nations)

A combination of advances in healthcare and falling birth rates is resulting in elongated periods of retirement and ageing populations. This shift in demographics will invariably impact housing requirements as the needs and wants of this market segment evolve. As a result, a period of experimentation is underway. Developers, operators and governments are seeking to develop solutions that match the expectations of both occupiers and investors. No single model has emerged and works as a “model” one size works for all due to the various cultures & traditions and how they impact the design process. Therefore, there is no one solution design that works for all.

### SENIOR LIVING OPTIONS

1. Aging in Place
2. Age-restricted communities
3. Independent Living
4. Assisted Living
5. Nursing Homes
6. Respite Care
7. Memory Care
8. Hospice
9. CCRC
10. Co-Housing
JAPAN

■ LOCATIONS
■ DEMOGRAPHICS
■ TRANSECT TYPOLOGIES
■ CASE STUDIES:
  ■ 1. SUN CITY KOBE TOWER
  ■ 2. SUN CITY SHOWA KINEN KOEN
  ■ 3. SUN CITY TAKARAZUKA
  ■ 4. JIKKA
Japan's leading developer of senior living communities, Half Century More (HCM), demonstrate the innovation of the highest quality of care & design in elderly environments. HCM tackled the "silver tsunami". Throughout the past 10 years, HCM developed numerous senior communities throughout Japan that embody a new lifestyle for the senior citizens of Japan. We can say that they redefined the Japanese senior living market by creating housing for the booming generation without losing their trust.

HCM’s 1st major project tackling the problem of senior living was Sun City Kanagawa, located on a hilltop an hour away from Tokyo. As of today, 16 different communities across 7 areas in Japan's Kanto along with Kansaï's regions. Over 4500 units are the new home for 6000 seniors in all the different stages of care. The flexibility from living residences that range in the number of units, location, and needs. HCM's communities vary in architecture, interior design, landscape that are polished and ameliorated through "kaizen".

Japanese traditional idealized VISION: the "eldest son always took care of the their elders; that the government health care system provided everything needed essentially for free; and that having one’s parents in teh care equated ABANDONMENT."

SENior living options
1. Aging in Place
2. Age-restricted communities
3. Independent Living
4. Assisted Living
5. Nursing Homes

6. Respite Care
7. Memory Care
8. Hospice
9. CCRC
10. Co-Housing

The country is home to the world’s oldest population, “where there are more adults in diaper than infants” (Taylor, 2014). Nowadays, Japan houses the highest population of citizens above the age of 65 worldwide. According to statistics from 2014, 33% of the Japanese population is above age of 60, 25.9% is 65 and older, and 12.5% is 75 and above. Japan has been in the “graying crisis” since 1980s when there was a decline of birth rate and the initiation of a boom in senior citizens. The government were aware of the new problem and have been diligent throughout the years by implementing new policies such as pensions, health-care benefits, and care to help address the issues that are raised by the aging society.

According to the Prime Minister Shinzo Abe, the estimation of the population in Japan will decline 15% by 2040. This booming isn’t a rare case just in Japan but also in most developed countries where fertility has declined and elderly proportion have increased at an alarming rate. However, Japan is experiencing this boom at a greater speed than the other Western parts.

ELDERCARE—within the Japanese society, there’s a long history where the traditional values of caring for the elders are set in order that the eldest son of the family is supposed to take care of the parents. The trend of institutionalizing older people was looked down upon and raised family neglect, shame, and abandonment of one’s family member. As the life expectancy has risen, family care of the elderly has become less possible. To avoid the stigma if institutional care, they started putting the seniors in the hospitals for extended periods of stay which was possible to the law of all patients above the age of 70 were free of charge. Over the years, institutionalism has started to be accepted.

DEMOGRAPHICS:

Japan's leading developer of senior living communities, Half Century More (HCM), demonstrate the innovation of the highest quality of care & design in elderly environments. HCM tackled the “silver tsunami”. Throughout the past 10 years, HCM developed numerous senior communities throughout Japan that embody a new lifestyle for the senior citizens of Japan. We can say that they redefined the Japanese senior living market by creating housing for the booming generation without losing their trust.
THE URBAN—RURAL DIVIDE

Japan’s biggest cities — Tokyo, Yokohama, Osaka and Nagoya — are growing due to the concentration of jobs, universities and political institutions. On the other hand, the population in the countryside rapidly shrinks and ages. The education and childcare are suffering in the outlying locations and booming in the larger cities. But in the outlying areas, the population is quickly turning into a gray wave.

The industrial areas around Nagoya and Osaka, also suffer from the same issue where there are many factories and workers’ families. The parcels contouring that corridor are ageing the fastest as well as the elderly face more difficulties in their day-to-day lives.
TRANSECT TYPOLOGIES
JAPANESE DOMINANT TYPOLOGIES

The japanese typology is known to be the birth location of new trend of luxurious hotel-esque featured projects style. Slowly this trend has been taking over the senior housing development. The senior population also prefer and support this typology.

- RURAL
- SUBURBAN VILLAGE
- URBAN RING
- URBAN CORE

Rural areas were the PAST preferred location for senior housing projects.

The disadvantage of senior housing in rural areas is its isolation as well as the size of the projects which tend to acquire hefty amount of land. Therefore, the horizontal circulation a senior resident is required to walk from one end to the other is too long.

The placement of senior housing in the suburban village was another chosen location when it first started. Yet the new senior developments NO LONGER take place in this area.

Location was chosen due to the isolation trend for housing and nursing homes. Along with the landscape proximity aspect.

Nowadays, the 2nd preferred location takes place in the urban ring to keep the community in close proximity to the parks and greenery as well as the urban core.

The residents would rather stay connected to their previous life and reside in a community that offers similar day-to-day activities to its residents.

The NEW TRENDS takes place in the urban core to keep the community in close proximity to the parks and greenery as well as their families.

Preferred location by the developers and residents as they choose the site of the project based on the proximity to numerous hospitals, national attractions, park and normal daily activities.

The location is highly popular within the senior active residents since their lives aren't relocated to the outskirts of the city.

The advantage of the tower senior housing typology is its "grandeur" since towers don't require long walks due to facilitated planned circulation vertically instead of horizontally.
**CASE STUDY 1**

**SUN CITY KOBE TOWER:**

**LOCATION:** Kobe, Kansai, Japan

**TYPE:** 35-story Luxury residential tower

**SITE:**
2.5 acre site area
224 units per acre

**DESIGN CONSIDERATION:**
Created for active seniors

**BUILDING:**
- 483 Independent Living units
- 90 long-term skilled nursing units
- 558,000 gsf
- 425-1,060 gsf avg unit size

**AMENITIES:**
- 500 seat auditorium,
atelier, library, karaoke, mahjong,
pool, spa, massage rooms, full fitness facilities, skyview restaurant

**DESIGN ARCHITECT:**
BAR Architects

**ARCHITECT OF RECORD:**
ASAI Architectural Office

**LANDSCAPE ARCHITECT:**
SWA GROUP

**INTERIORS:**
BAMO

**DEVELOPER:**
Half Century More

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**PROJECT GOALS:**

**MAJOR GOALS:**

**Community:** creating an identity to public amenities at lower levels. The residential tower was placed at the edge to allow for a large central courtyard. Amenities are placed around the walking promenade of the courtyard such as library, fitness, pool & spa “Ofuro”, tea lounge, billiards, club, mahjong, karoke, 500 seat auditorium, multipurpose room, & lobby lounge.

**Care facility:** Skilled nursing stations are placed on the 2nd-4th floors adjacent to the towers with a private nursing garden which has 2 access points. Quality care facilities are strategically placed there for easy access to the surrounding hospitals.

**Design:** Integration of the outdoor-indoor garden feel was vital in the design process. The amenity spaces all have their own outdoor space with a garden view which was an essential component to the senior occupants. Culturally, the garden outdoor space is a key component in the seniors tradition and way of life.
**Innovations:** Unique features that were embodied into the design of the project is the arrangement of the major program and the incorporation of the various garden spaces in a high density urban context. Outdoor garden spaces are crucial for senior citizens which was a design consideration that developed in putting the residential tower to the rear side of the site and stands away from the main boulevard. Its also positioned for the best access to public transportation.

- **Water features to create a sense of tranquility**
- **Mahjong dedicated area as a way to bring the community together.**
- **Zen garden around the property with embedded seating with views to the wateristic features.**
- **Loop promenade**

80% of the ground floor is dedicated to common areas and social activities. The common areas are designed with high ceilings, a natural look to highlight the visual and spiritual connection with the garden and vegetation around the site.

**CONCEPT:** designing a “peaceful harbor” which was the vital component that enabled the selection of materials.

- **Light, neutral and bright tones from the ground floor and switches to dark and powerful tones towards the top.**
- **Creating wrap-around balconies with the strict code had a key impact on the tower. Creating a new community in an industrial district transitioning to a residential use district. Public amenities placed on south side to maximize amount of sunlight.**

**UNIT & PROGRAM ANALYSIS:**

**Unit Type A:** This unit type is one of the typical units. It was designed with a framed view of the distant bridge. Unit A consists of 1BD & 1 bath with a small kitchenette and living room. A key feature in the unit is the balcony that creates the indoor-outdoor space.

**Unit Type D:** This unit type is one of the corner typical units. It was designed with two framed views, either the mountain, distant bridge or harbor views. The corner units are designed to be larger than the typical units. Unit D consists of 2BD & 1 bath with a small kitchenette and living room. A key feature in the unit is the balcony that creates the indoor-outdoor space with a waterfront view and mountain view.

**Unit Type Z:** This unit type is one of the typical units. It was designed with a framed view of the distant bridge and the harbor view. Unit Z consists of 1BD & 1 bath with a small kitchenette and living room. A key feature in the unit is the balcony that creates the indoor-outdoor space that also looks over the main courtyard that incorporates the water and garden features.

**Design challenges:** Maintaining a sense of community with the design of a tower. Creating spaces and circulation to promote and increase their interaction within the living residents.

**LEGEND:**
- Units
- Dining
- Amenities

Dimensions in meters.
COMMON SPACES:

Unique geographical context with framed views to Osaka Bay to the south & inland Mt. Rokko. Outdoor & indoor courtyards that surround the units with waterscape features. A promenade circulation around the courtyard allowing different access points to the public amenities.

Coordination of interior palette materials and finishes to be extended to exterior patios to increase the indoor-outdoor feel. Interior design for luxury high end with large windows with courtyard garden views. Interior decoration and art pieces were inspired by origami and mirrors the 1000 year old Japanese rich culture.

The color palette, materials and finishes convert into darker, more sombre tones as they mirror the exteriorscenic view. The pool, jacuzzi, elegant dining rooms and fancy lounges are places on the highest level of the tower to enable the panoramic view of the scenery.

15% of the gross building area is dedicated to the common spaces and amenities for the seniors. This percentage allows the diversity and quantity of the various amenities provided within the program alone. Amenities are situated on the ground floor to take advantage of the sun, light and tranquil garden views. The amenity spaces are mounted to open to either the main courtyard or vistas using corridors to keep the eye

PROGRAM & AMENITIES ANALYSIS:

“Lantern” (lighthouse) Accomodates the “Ofuro” Japanese serene spa with a private rooftop garden.

34th Floor: Sky lounge and dining services with panoramic view of the harbor and mountains.

“Lantern” (lighthouse) 33rd floor: The top of the tower houses the premium independent living units.

6th floor: accommodates the pool, fitness facilities and spa as an extention to the rest of the amenities on the ground floor.

Independent Living Units:
1-33rd floor: 483 units dedicated to IL seniors that vary from corner units to regular units.

3 story base: houses the 50 skilled nursing units with a dining area and the known Ofuro bath.

MORE UNIQUE FEATURES:

Cinema Ofuro Spa Auditorium Atelier
Fitness & wellbeing gyms Mahjong Karaoke
Community common areas Skyview Restaurant Convenient store
CASE STUDY 2
SUN CITY SHOWA KINEN KOEN:

LOCATION: Tokyo, Japan

TYPE: 3 mid-rise towers with care center joined by a ring of public space, frame the park to create a community.

SITE: 8.7 acre site area
70 units per acre

DESIGN CONSIDERATION: Extension of the park

BUILDING: 503 independent living units
104 assisted & skilled nursing units
103,000 gsf
580 gsf average unit size

AMENITIES: multi-purpose hall, library, lobby lounge, garden areas, Japanese baths “Ofuro”, 500-seat auditorium, atelier, mahjong, billiards, karaoke, full fitness facilities, pool spa & massage rooms

DESIGN ARCHITECT: BAR Architects

ARCHITECT OF RECORD: ASAI Architectural Office

LANDSCAPE ARCHITECT: SWA GROUP

INTERIORS: BAMO

DEVELOPER: Half Century More

PROJECT GOALS:

MAJOR GOALS:
Community: Main vision of the project was to make use of the national park Showa Kinen Koen. To be able to create the uninterrupted view they used the japanese garden known as “Shakkei” as a design technique. This technique incorporates and blends the close with distant vision into the design. The community was designed without any physical barriers between the site and national par to maintain the nature flow.

Care facility: Skilled nursing stations are placed on the 2nd-4th floors adjacent to the towers with a private nursing garden which has 2 access points. Quality care facilities are strategically placed there for easy access to the surrounding hospitals.

Design: Integration and extension of the Showa park. The entry approach through a wooded estate drive along the park’s edge towards the dining and library gardens. The outdoor-indoor garden feel was vital in the design process.

Location: The residence acquires more of a foresty environment since the water component is missing. Instead of the ocean or river, the design created lakes around the property. Numerous clinics and hospitals are surrounding the residence and are within close proximity. Even though the facility acquires skilled nursing stations the amount of IL units supersedes therefore, the proximity of hospitals was an essential design consideration.
UNIT ANALYSIS:

**Units**: Sun orientation and views were both studied to create a balance of unobstructed views of the park along with the private custom garden spaces. Above are the typical IL unit types for active seniors. The floor plans are arranged with incorporated gardens for the larger units and the smaller ones with a terrace with garden views.

**Unit Type A:**
The typical smallest unit are designed like this type. Unit A consists of 1BD & 1 bath with a small kitchenette and living room. A key feature in the unit is the balcony that creates the indoor-outdoor space.

**Typical Unit B**
Consists of 1BD & 1 bath with a small kitchenette and living room. A key feature in the unit is the corner balcony that creates the indoor-outdoor space.

**Typical Unit C**
Consists of 2BD & 1 bath with a small kitchenette and living room. A key feature in the unit is the balcony that creates the indoor-outdoor space.

**Unit Type D:**
This unit type is the penthouse. Consists of 2BD & 1 bath with a small kitchenette and living room. A key feature in the unit is the large spacious balcony that creates the indoor-outdoor space with a seating and lounging area.

**Legend**
- Units
- Dining
- Amenities

Dimensions in meters.

**Courtyards**:
A promenade circulation through the main courtyard, and around the courtyard facing the park allowing different access points to the main public amenities. Withing the promenade;
- Water features to create a sense of tranquility
- Mahjong dedicated area as a way to bring the community together.
- Garden around the property with embedded seating with cascades.
- Tea Lounge

The central garden court features a water cascade, a reflecting pool, and enclosed bridge connecting the major wings of the first-floor public areas. A small, formal healing garden provides seating areas shaded by vine-covered pergolas. Sunken gardens surround public baths and a community pool, with an intricately carved slope planted with overlapping ribbons of flowering shrubs and groundcover.

**Tower Design**:
Four-fan towers are designed to maximize the south side of the project. They all connect to the ground floor which complies all the majority of amenities and hallsthat could be used publicly and leased regularly for large events. Each fan like the one to the left forms a series of terrace spaces that vary. Use of natural colors enhances the connection with nature.

**Innovations**:
Unique features that were embodied into the design of the project is the beloved National Park that surrounds the site to the east and south. The landscape architects SWA Group designed the landscape with the forest character which acquires long strolling garden with various tree types originating from the area.

The nursing units start at the ground floor on the southeast wing.

The independent living units start on the north side of the wing and spread to the four fan towers.
PROGRAM & AMENITIES ANALYSIS:

Independent Living Units:
1-9th floor:
503 units dedicated to IL seniors that vary from corner units to regular units.

Amenities:
Karaoke room, lobby and club room that brings the seniors together.

COMMON SPACES:
Unique geographical context with frames views to the Showa Kinen Koen. Outdoor & indoor courtyards that surround the units with waterscape features. A promenade circulation around the courtyard allowing different access points to the public amenities.

The ofuro/spa/wellness and pool component. Public bathing is a ritual in Japanese culture; incorporating this with a wellness component and social awareness affords a new opportunity in a centuries-old tradition.

Main lobby and lounge space and beyond it the primary courtyard, which is connected by an outdoor loggia adjacent to the lobby, reflecting pond, and a "floating bridge" across the water.

Ofuro Spa
Auditorium
Cinema
Dining
Skyview Restaurant
Massage
Mahjong
Karaoke
Atelier
Convenient store

503 units dedicated to IL seniors that vary from corner units to regular units.

6th floor Amenities:
Accommodates the numerous “Ofuro”: japanese serene spa, lobby, and salon.

3 story base: houses the 90 skilled nursing units

10th floor: Formal and private dining services with panoramic view of the national park.

Amenities:
Karaoke room, lobby and club room that brings the seniors together.

MORE UNIQUE FEATURES:

15% of the gross building area is dedicated to the common spaces and amenities for the seniors. This percentage allows the diversity and quantity of the various amenities provided within the program alone.
**PROJECT GOALS:**

**MAJOR GOALS:**

Community: Three courtyards were designed, all accessible from public rooms. They were planned to be unique from one another yet easily recognizable for residents to reach and locate. The Bonsai court, Bamboo courtyard, and the Landform courtyard each were designed with distinct purposes and unique features. “For a culture that is very attuned to nature, compelling views of "garden" from inside is an important part of everyday life.”

Care facility: Quality care facilities are strategically placed there for easy access to the surrounding hospitals. The Landform courtyard is circled by the 27 private units of the Care Center. The courtyard’s purpose is to serve the Care center which provides 24/7 nursing care for permanent residents along with rehabilitation needs of IL residents. The landscape is elevated in order for the elevated and bedridden residents have a better visualisation.

Design: The outdoor-indoor garden feel was vital in the design process. Culturally, the garden outdoor space is a key component in the seniors tradition and way of life in Japan. The Bonsai court is located on the same level as the arrival court and can be accessed through the library. The main purpose of the courtyard was for a gallery to take place to display heirloom bonsai. A circulation stroll path was also designed to enable residents to explore the terrace space. The Bamboo courtyard is placed on the same level as the fountain court. It was designed as the quiet outdoor space that is overlooked by units and houses the post-activity relax terrace for the amenities spaces on that wing.

**LOCATION:** Osaka, Japan

**TYPE:** 6-storied Prestigious mountain side community.

**SITE:**
7 acres
41 units per acre

**DESIGN CONSIDERATION:**
Created for maturing population

**BUILDING:**
285 independent living units
27 care units
325,000 gsf

**AMENITIES:**
Indoor swimming pool, garden courtyards, reception & lobby lounge, fitness center, spa complex “Ofuro”

**DESIGN ARCHITECT:**
BAR Architects

**ARCHITECT OF RECORD:**
ASAI Architectural Office

**LANDSCAPE ARCHITECT:**
SWA Group

**INTERIORS:**
BAMO
ODC/A (Skilled Nursing)

**DEVELOPER:**
Half Century More

**Location:** Maintaining a sense of community from the other waterfront residential towers. Numerous clinics and hospitals are surrounding the residence and are within close proximity. Even though the facility acquires skilled nursing stations the amount of IL units superside therefore, the proximity of hospitals was an essential design consideration.
UNIT ANALYSIS:

Innovations: Solar exposure to all units guided building specifications & orientation. Single-loaded corridor floor layout was required to allow all units to face either SE or SW which developed into a courtyard scheme set on the site 45 degrees off the N axis.

Unit Type A:
The typical smallest unit consists of 1BD & 1 bath with a narrow kitchenette and living room. A key feature in the unit is the balcony that creates the indoor-outdoor space.

Typical Unit B
Consists of 2BD & 2 bath with a closed kitchen and spacious living room. A key feature in the unit is the corner balcony that creates the indoor-outdoor space.

Typical Unit C:
Consists of 2BD & 2 bath with a closed kitchen and large living room. Key feature in the unit is the spacious corner balcony that creates the indoor-outdoor space.

Amenities:
40% of the ground floor is dedicated to common areas and social activities. The common areas are designed with high ceilings, a natural look to highlight the visual and spiritual connection with the garden and vegetation around the site. The courtyards are surrounded with amenities that have direct access to the outdoor spaces as well as some ground floor units.

Promenade circulation around the three main courtyards allowing different access points to the main public amenities. Within the various promenades:

- Water features to create a sense of tranquility
- Mahjong dedicated area as a way to bring the community together.
- Zen garden around the property with embedded seating with views to the wateristic features.
- Loop promenade
- Supervised outdoor space

Dimensions in meters.
COURTYARD ANALYSIS:

Bonsai Court:
Located on the same level as the arrival court and can be accessed through amenity spaces. The main purpose of the courtyard was for a gallery to take place to display heirloom bonsai. A circulation promenade was also designed to enable residents to explore the terrace space.

Bamboo Courtyard:
Placed on the same level as the fountain court. Quiet outdoor space designed for post-activity relax terrace for the amenities spaces on that wing.

Landform Courtyard:
Courtyard is dedicated to the Care Center. Engulfed by the 27 private units of the Care Center. The courtyard provides 24/7 nursing care and perfect setting to overlook the residents who require extra assistance. The landscape is elevated in order for the elevated and bedridden residents have a better visualisation.

Fountain Entrance:
Elongated waterscape fountain entrance attracting the residents upon arrival to the project site. The surrounding entrance landscape is placed alongside both sides of the fountain lane.

COMMON SPACES:
15% of the gross building area is dedicated to the common spaces and amenities for the seniors. This percentage allows the diversity and quantity of the various amenities provided within the program alone.

AMENITIES:
The central courtyard allows landscape separation between units and public realm. The tree planting were strategically placed with dual purpose to provide shade and create privacy to the IL units.

Coordination of interior palette materials and finishes to with neutral tones throughout the facility.

The Sun City Takarazuka courtyard planning approach provides a variety of outdoor spaces to accommodate more active residents, as well as, larger group gatherings.

MORE UNIQUE FEATURES:

- Ofuro Spa
- Auditorium
- Cinema
- Dining
- Skyview Restaurant
- Massage
- Mahjong
- Karaoke
- Atelier
- Convenient store
- Community common areas
- Fitness & wellbeing gyms
CASE STUDY 4
JIKKA:

LOCATION: Shizuoka Prefecture, Japan. Rural district of Shizuoka

TYPE: Single family private residence senior living.

SITE: 7 acres

DESIGN CONSIDERATION: Created for active seniors

BUILDING: Single family typology consists of 5 huts.

AMENITIES: Indoor swimming pool, garden, fitness jacuzzi, spa complex

DESIGN ARCHITECT: Issel suma/SUMA
ARCHITECT OF RECORD: Issel suma/SUMA
LANDSCAPE ARCHITECT: N/A
INTERIORS: Issel suma/SUMA
DEVELOPER: Half Century More

PROJECT GOALS:

MAJOR GOALS:

Community: The house sits on top of the mountain ridge where the top had been leveled by the previous owner. The roofline of the huts is to recall the previous ridgeline.

Care facility: The ceiling of the dining room is at 8m creating a sublime space. It is a space where they greet new people from the local community and welcome their old friends from the city. The guest room is equipped with a wheelchair accessible bath where they can accompany their parents and also their disabled guests.

Design: The house consists of 5 huts. Each hut has its own proportion matching each program. The bedroom is just big enough to have 2 beds with low ceiling creating a cocoon like space.

Location: Located in the rural district of Shizuoka, the proximity of Japan yet placed in the middle of a forestry environment.
UNIT ANALYSIS:

Units: Sun orientation and views were both significant in the marketing of the IL units. Above are the 3 typical IL unit types for active seniors. The floor plans are arranged with larger units at the corners and south with the waterfront view.

Innovations: Unique features that were embodied into the design of the project is the arrangement of the major program and the incorporation of the various garden spaces in a high density urban context. Outdoor garden spaces are crucial for senior citizens which was a design consideration that developed in putting the residential tower to the rear side of the site and stands away from the main boulevard. It’s also positioned for the best access to public transportation.

PROGRAM ANALYSIS:

Bedroom: Smallest hut out of the five is dedicated as the independent living bedroom. The room contains 2 large openings as well as has the lowest ceiling from all the huts.

Dining space: Largest hut with the highest ceiling out of all five. Contains a kitchen with a lounging dining space. The roof contains an enclosed glass opening that allows sunlight to take over the room. The form of the hut is large at the ground floor and narrows towards the top. The sun enters the space from the top as well as both sides.

Guest room and Amenities: The two huts have separate roofs yet connect. They don’t have any walls to separate the two spaces. One hut contains a pool/jacuzzi that consumes most of the room. The roof contains an enclosed glass opening as well that allows sunlight to take over the room. The connecting hut is dedicated for a guest room that can be transformed later for nursing or assisted living purposes to the senior living in the house.

Innovations: Unique features that were embodied into the design of the project is the arrangement of the major program and the incorporation of the various opening enabling uninterrupted views of exterior forest surrounding. Outdoor garden spaces are crucial for senior citizens which was a design consideration that encouraged the location of the huts.
PROGRAM & AMENITIES ANALYSIS:

Design challenges:
Creating spaces and circulation to promote and increase a unique senior living typology.

COMMON SPACES:
15% of the gross building area is dedicated to the common spaces and amenities for the seniors. This percentage allows the diversity and quantity of the various amenities provided within the program alone.

ANALYSIS:

AMENITIES:

Unique geographical context with framed views to surrounding forest environment.

Coordination of interior palette were to showcase the concrete material all throughout the house with a white pitched ceiling.

Coordination of interior ceilings were kept white. Some had an opening with glass to enhance light to enter and others were closed. The open ones also showed the overlapping large trees that created a nature feeling indoors.

Independent Living Units:
1 room dedicated to IL seniors and a guest room that can be reused in the future for Assisted living/nursing unit.

Amenities:
Karaoke room, lobby and club room that brings the seniors together.

Garden view dining:
Dining room with a kitchen with a forestry view of the surrounding.

An opening on the top of the hut acting like an oculus allowing sunlight to enter

Amenities hut:
accomodates the pool/jacuzzi spa

More unique features:
- Terraces
- Massage
- Dining
- Ofuro Spa

LEGEND
- Units
- Dining
- Amenities
UNITED STATES OF AMERICA

LOCATIONS

DEMOGRAPHICS

TRANSECT TYPOLOGIES

CASE STUDIES:

1. THE MATHER
2. THE CLARE AT WATER TOWER
3. RIVERWALK RESIDENCES AT LAS OLAS
4. THE SKYLINE
Nowadays, senior housing especially in the United States is not a prominent market here unlike other countries such as Japan, Switzerland, and other parts of Europe yet it's starting to boom. The concept behind this topic is to create and promote senior living within these luxurious hotels that already have all the other necessary amenities. All these hotels offer suites and housing and amenities for all types of age from newborns to adults but don’t tailor them to also benefit the elderly. There is a programmatic overlap between the early stages of life and the last stages such as they both acquire different levels of assistance as they grow. For kids they offer services such as daycare, parks, playgrounds and more yet additional services modeled for seniors would enable the hospitality to grow as a whole and offer services to all the age spectrum.

**SENIOR LIVING OPTIONS**

1. Aging in Place
2. Age-restricted communities
3. Independent Living
4. Assisted Living
5. Nursing Homes
6. Respite Care
7. Memory Care
8. Hospice
9. CCRC
10. Co-Housing

**DEMOGRAPHICS:**

**URBAN / COMMUNITY INTEGRATED HOUSING:**
The rest of the amount of the respondants state that urban integrated housing seems more attractive.

**“APARTMENTS FOR LIFE”/AGE-IN-PLACE:**
About two-thirds of the respondants state that aging in place seems more attractive.

**HOME-BASED SERVICES:**
The respondants state that home-based services seem more appealing.

**INTERGENERATIONAL CAMPUS LIVING:**
About half of the 2019 respondants state that co-living seems more attractive.
The American typology is known to be the “campus/village” style but slowly has been changing to adapt to the preferences of the main population that’s concerned. Case studies within the research analyze the atypical up and coming urban core trending projects that exist in the US.

RURAL
SUBURBAN VILLAGE
URBAN RING
URBAN CORE

Rural areas is the PREFERRED location for senior housing projects.

The placement of senior housing in the rural areas are extremely common in the United States since the main typology is the “village/campus” style which required a hefty amount of land.

The disadvantage of the village/campus senior housing typology is its substantial size since the horizontal circulation a senior resident is required to walk from one end to the other is too long.

Still the dominant common choice for U.S.A.

The placement of senior housing in the suburban village was another chosen location when it first started. Yet nowadays, the preference is the urban core.

Location was chosen due to the isolation trend for housing and nursing homes. Along with the landscape proximity aspect.

The new trend takes place in the urban core to keep the community in close proximity to the parks and greenery as well as their families.

The location is preferred by the developers and residents as they choose the site of the project based on the proximity to numerous hospitals, national attractions, park and normal daily activities.

The advantage of the tower senior housing typology is its "grandeur" since towers don’t require long walks due to facilitated planned circulation vertically instead of horizontally.

The 2nd preferred location for NEW TREND just started to transcribe. Opportunity for projects to take place in the urban ring to keep the community in close proximity to the parks and greenery as well as the urban core.

The residents would rather stay connected to their previous life and reside in a community that offers similar day-to-day activities to its residents.
PROJECT GOALS:

MAJOR GOALS:

Community: creating an identity to public amenities at lower levels at lower levels. 18,000 square footage dedicated to retail and restaurants. The residential tower was placed at the edge corner. The amenities are placed on the ground floor which attract the people around the two sides of the corner.

Care facility: 78 Skilled nursing units are placed on the Quality care facilities are strategically placed there for easy access to the surrounding hospitals.

Design: Integration of the outdoor-indoor garden feel was vital in the design process. Outdoor terraces on the 3rd, 4th and 5th floors, street-level plazas and a large, private “activity event lawn,” with additional smaller lawns and private gardens.
Typical Floor Plan Set A:
Floors 17-27 consist of senior independent living units that are analyzed to the left. The floor has seven different unit types.

Design challenges:
Creating circular balconies with the strict code had a key impact on the tower. The shape played a vital role on the interiors since they offer uninterrupted panoramic views of the city.

Communal spaces were designed with panoramic views, comfortable seating and kitchens to encourage the seniors to get together.

Growing trend is for senior communities to mimic hotelsque features with multiple dining venues, flexible menus and extended dining times.

**PROGRAM & UNIT ANALYSIS:**

M09: This unit type placed on the 16th floor is one of the typical units. Unit M11 consists of 1BD, 1 bath & dining/living space dedicated to a kitchen and dining area. A unique feature is small balcony placed in the center of the unit enabling light to enter the apartment.

M11: This unit type is the second circular corner unit. Unit M11 is the second largest unit which consists of 2BD, 2.5 bath & den with a large space dedicated to a kitchen, great room and dining area. A key feature in the unit is the circular great room with 2 balconies on opposite ends creating the indoor-outdoor space with a view.

M17: This unit type is the largest unit which takes up the whole corner of the building. One of the corner typical units. The unit has a view of 3 corners surrounding the building. The corner units are designed to have 2 balconies on either side of the corner street as well as a circular great room to allow a peripheral panoramic view. Unit M17 consists of 2BD, 2.5 bath & a den with a kitchen, living room, dining space and dedicated family area. A key feature in the unit is the circular great room with 2 balconies on opposite ends creating the indoor-outdoor space with a view.

M13: This unit type is a typical unit. Unit M11 consists of 1BD, 1.5 bath & dining/living space dedicated to a kitchen and dining area. A unique feature is small balcony placed in the center of the unit enabling light to enter the apartment. The unit contains only 1 balcony that is placed within the living area.

M16: The unit type was designed with the bedrooms on either extremities of the unit enabling all the dining, kitchen and living space in the center. Consists of 2BD & 2 bath with a kitchen and living room. The unit contains only 1 balcony that is placed within the living area.

**LEGEND**

- Units
- Dining
- Amenities

Dimensions in feet.

**Outdoor garden terraces:**
Unique features about the project:
- Embedded seating
- Loop promenade
- Outdoor terraces on floors three, four and five
- Street-level plazas
- Large, private “activity event lawn,” with additional smaller lawns
- Private gardens.

**Typical Floor Plan Set B:**
Floors 5-16 consist of senior independent living units that are analyzed to the left. The floor has seven different unit types.
COMMON SPACES:
15% of the gross building area is dedicated to the common spaces and amenities for the seniors. This percentage allows the diversity and quantity of the various amenities provided within the program alone.

MORE UNIQUE FEATURES:
- Assisted living: houses the 78 skilled nursing units
- Independent Living Units: 17-27th floor: 300 units dedicated to IL seniors that vary from corner units to regular units.
- Garden: Accomodates outdoor terraces on levels 3,4 and 5. Plazas surrounding the entrance of the building along with private “activity event lawn”.
- Restaurants: Accomodates various lounges and dinning services.
- Amenities: Accomodates the retail.
- Ofuro Spa
- Cinema
- Dinning
- Massage
- Terraces
- Fitness & wellbeing gyms
CASE STUDY 2
THE CLARE AT WATER TOWER:

LOCATION: 55 E. Pearson St.
Chicago, Illinois. Situated in the middle of Loyola University Water tower campus

TYPE: 53 story tower

SITE: 4 acre site area

DESIGN CONSIDERATION: Created for active seniors in 2009 and renovated in 2016.

BUILDING: 271 independent living units
39 AS, 45 MC & skilled nursing units
18,000 sf of retail & restaurants

AMENITIES: Terraces, 3 restaurants with skyview restaurant, atelier, library, pool, spa, massage rooms, full fitness facilities

DESIGN ARCHITECT: Perkins + Will (PW)
ARCHITECT OF RECORD: Perkins + Will (PW)
LANDSCAPE ARCHITECT: Douglas Hoerr Landscape Architecture, Inc.
INTERIORS: Interior Design Associates, Inc.
DEVELOPER: Greystone Communities, Inc.

PROJECT GOALS:

MAJOR GOALS:

Community: Creating an identity to public amenities at lower levels at lower levels. The residential tower was placed at the edge to allow for a large central courtyard. Numerous amenities are placed around the walking promenade of the central courtyard such as library, fitness, pool & spa "Ofuro", tea lounge, billiards, club, mahjong, karoke, 500 seat auditorium, multipurpose room, & lobby lounge.

Care facility: The terraces were designed to help individuals that struggle with memory care, assisted living assistance and rehabilitation assistance. The terraces are designed with hotelesque features but functions and offers assistance and skilled nursing. The terraces also posses an alignment with Northwestern.

Design: One of the tallest senior residential buildings. Integration of the university due to the location was essential. The building includes 50,000 sq ft of classroom space.

Location: Maintaining a sense of community from the other waterfront residential towers. Alignment with the Northwestern hospital as well as surrounded by Loyola University buildings. Three parks are within close proximity as well as the famed gold coast. The facility acquires rooms that are fully equipped for skilled nursing, assisted living assistance and rehabilitation assistance.
**Innovations:** Unique features that were embodied into the design of the project is the arrangement of the major program and the incorporation of the various garden spaces in a high density urban context. Outdoor garden spaces and rooftop gardens are crucial for senior citizens.

**The Versailles:** This unit type is one of the 1BD, 1bath & dining/living space and balcony.

**The Kensington:** This unit type is one of the 2BD, 2bath & dining/living space and balcony.

**The Hampton:** This unit type is one of the 3BD, 2bath & dining/living space and balcony.

**The Buckingham:** This unit type is one of the 2BD, 2bath & dining/living space and balcony.

**The Inverary:** This unit type is one of the 1BD, 1bath & dining/living space without a balcony.

**The Leeds:** This unit type is one of the 1BD, 1bath & dining/living space without a balcony.

**The Stirling:** This unit type is one of the 2BD, 2bath & dining/living space and without a balcony.

**The Inverary:** This unit type is one of the 1BD, 1bath & dining/living space without a balcony.

**The Versailles:** This unit type is one of the 1BD, 1bath & dining/living space and balcony.

**The Whitehall:** This unit type is one of the 1BD, 1bath & dining/living space and balcony.

**Facade analysis:**
The building’s design conveys the different amenities and functions of the building in an organized manner without appearing like a clutter of functions stacked up on one another. One of the main design challenges is to create a tower without amalgating the different ceiling heights. The Clare tower expresses a cohesive recurring fenestration pattern that aligns with the transforming floor plans. The tower follows the ABA window module that works with all the various floor layouts.

**Plan analysis:**
The building has two main points of entry; one for the Clare residents and one for the University community. The university hosts the school of communication with the tower podium. The client wanted two separate entries; one for Independent living and the other for healthcare. The entries were coordinated with the floor’s circulation layouts.

**CIRCULATION:** An important key feature that plays a vital role in the design is the circulation throughout the tower. The elevator core accommodates 4 separate travel paths; independent living, health care (assisted living), parking, Loyola.

To acclimate the paths, a back-to-back elevator core was necessary. Loyola has one elevator dedicated while the seniors have 5 elevators, 2 for service and back of house (BOH).

**Outdoor garden terraces:** Unique features about the project:
- Embedded seating
- Outdoor terraces
- Private rooftop garden

**PROGRAM & UNIT ANALYSIS:**

Dimensions in feet.

**LEGEND**
- Units
- Dining
- Amenities
- Dimensions in feet.
COMMON SPACES:

15% of the gross building area is dedicated to the common spaces and amenities for the seniors. This percentage allows the diversity and quantity of the various amenities provided within the program alone.

Unique geographical context with surrounding of a university. Outdoor terrace extends off the main tower due to its location on the podium. A circular promenade around the terrace enabling a pathway with surrounded greenery yet in the urban core of Chicago.

Coordination of interior palette materials and finishes to be extended to exterior patios to increase the indoor-outdoor feel. Private balconies to maximize views of the courtyard garden and city views.

The pool and salon are placed on the same floor as the large open air terrace overlooking the greenery and surrounding buildings.

MORE UNIQUE FEATURES:

Garden:
Accommodates outdoor terrace above the parking level. Acquires an elevated view of the city creating a floating feeling with seating.

Dining area & Restaurants:
Accommodates various lounges and dining services. Located on floors 16-19 to take advantage of the views over there adjacent properties and surrounding. It also looks over the garden courtyard designed.

Amenities:
Accommodates the pool, fitness facilities and spa as an extension to the rest of the amenities on the ground floor located the 9th floor.

Assisted Living/Skilled Nursing: 7 floors worth of nursing units.

Independent Living Units:
17-27th floor: 271 units dedicated to IL seniors that vary from corner units to regular units.

Parking: available for students at Loyola University, senior visitors and the workers within the building.

AMENITIES:

AMENITIES:
**CASE STUDY 3**  
**RIVERWALK RESIDENCES OF LAS OLAS:**

**LOCATION:** 333 North New River Drive East, Fort Lauderdale, FL

**TYPE:** 42 story tower

**SITE:** 3 acre site area

**DESIGN CONSIDERATION:** Created for active seniors. Completion 2021

**BUILDING:**
- 192 independent living units
- 152 assisted living units
- 57 memory care units
- ACLF
- 220,000 s.f. of Amenities

**AMENITIES:**
- Five-star restaurants, a rooftop bar, a full-service spa, a fitness center, an outdoor pool, hotel rooms, valet parking

**DESIGN ARCHITECT:** Corwell Architects

**ARCHITECT OF RECORD:** Corwell Architects

**LANDSCAPE ARCHITECT:** Cadence

**INTERIORS:**
- Interior Design Associates, Inc.

**DEVELOPER:** Ocean Land Investments

**TYPE:** 42 story tower

**AMENITIES:**
- Five-star restaurants, a rooftop bar, a full-service spa, a fitness center, an outdoor pool, hotel rooms, valet parking

**LOCATION:** 333 North New River Drive East, Fort Lauderdale, FL

**BUILDING:**
- 192 independent living units
- 152 assisted living units
- 57 memory care units
- ACLF
- 220,000 s.f. of Amenities

**SITE:**
- 3 acre site area

**DESIGN CONSIDERATION:**
- Created for active seniors.
- Completion 2021

**PROJECT GOALS:**

**MAJOR GOALS:**

**Community:** Exterior amenities will include an at grade plaza with seating spaces overlooking the New River, a portal park to connect the Riverwalk to shopping and dining locations, a sky garden, elevated pool deck and therapy gardens.

**Care facility:** The terraces were designed to help individuals that struggle with memory care, assisted living and rehabilitation. The terraces are designed with hotel-esque features but functions and offers assistance and skilled nursing.

**Design:** Integration of the river walk due to the location was essential. The building accommodates retail, office spaces and parking for senior visitors and the office workers within the building.

**Location:** Maintaining a sense of community from the other waterfront residential towers. The riverfront enables a view of the future riverwalk with boats as well as a city. Proximity of walking distance to the New River, portal park to create a connection to the retail and riverwalk.
**Innovations:** Unique features that were embodied into the design of the project is the arrangement of the major program and the incorporation of the various garden spaces in a high density urban context. Outdoor planters were placed in various locations surrounding the entrance which was a design consideration that developed in embedded planters with seating creating a street-level plaza.

**Program & Unit Analysis:**

<table>
<thead>
<tr>
<th>Units</th>
<th>Dining</th>
<th>Amenities</th>
</tr>
</thead>
<tbody>
<tr>
<td>25-40th floor</td>
<td>192 independent living units</td>
<td>11-15 &amp; 18-23 floors assisted living nursing units</td>
</tr>
<tr>
<td>Parking &amp; Offices: available for senior visitors and the office workers within the building.</td>
<td>Restaurant: Accomodates various lounges and dining services.</td>
<td>Garden: Accomodates outdoor terraces on floor 16, skygarden.</td>
</tr>
</tbody>
</table>
COMMON SPACES:
Street plaza with retail. Plaza eventually leads to waterscape features of the New River and blends with the riverwalk promenade.

Interior palette materials and finishes mimic luxury hotel features. The use of long and wide windows are frequently used to maximize the amount of sunlight entering the spaces.

The dining and amenities floors tend to be created with a majestic feeling. Creating higher floor to floor heights, mezzanines or ceilings tend to have a pattern.

15% of the gross building area is dedicated to the common spaces and amenities for the seniors. This percentage allows the diversity and quantity of the various amenities provided within the program alone.

MORE UNIQUE FEATURES:
- Cinema
- Spa
- Salon
- Spa
- Pool
- Terrace
- Skyview Restaurant
- Fitness & wellbeing gyms
- Dressing
- Massage

PROGRAM & AMENITIES ANALYSIS:
- Restaurants: Accommodates various lounges and dining services.
- Independent Living Units: 25-40th floor: 192 independent living units
- Hotel-esque Amenities: accommodations fitness facilities and spa as an extension to the rest of the amenities.
- Garden: Accommodates outdoor terraces on floor 16, skygarden.
- Assisted living: 11-15 & 18-23 floors assisted living nursing units
- Memory Care living: 8-10 memory care nursing units
- Amenities: accommodates the pool and common amenities
- Parking & Offices: available for senior visitors and the office workers within the building.
PROJECT GOALS:

MAJOR GOALS:

Community: Create a vibrant new senior living community that contributes to the existing Skyline residences in First Hill. Provide safe connections to the existing community and respond to the scale, context and character of the neighborhood.

Care facility: The terraces were designed to help individuals that struggle with memory care, assisted living and rehabilitation. The terraces are designed with hotelesque features but functions and offers assistance and skilled nursing.

Design: Integration of the stepped slope to the location was essential. The building includes retail along the stepped slope that eventually leads to the water.
LEVEL B2: The lowest level of the building housing electrical rooms, trash and fire pump.

LEVEL B1: Level houses some of the amenity areas such as hair salon, fitness and more MEP rooms.

LEVEL 1: The majority of the amenities are placed here such as the auditorium, lounge, bistro, meeting rooms and more.

LEVEL 2: This floor is the mezzanine of level 1. Mostly houses lounge and dining area with one multipurpose room.

LEVEL 3: Unique set of units on this floor don’t repeat themselves throughout the tower. The circulation corridors also vary from all the other floors.

LEVEL 4: This level houses 3 units with spacious balconies. The game/library room takes a whole corner with a very spacious outdoor terrace.

LEVEL 5-8: The floor houses typical units all acquiring balconies aside from the NE unit.

LEVEL 9-19: The floor houses typical units all acquiring balconies.

LEVEL 20: The floor houses typical units all acquiring larger balconies from the rest of the floors. Each balcony has now 2 panoramic views since they all take up a corner of the tower.

LEVEL 21: The highest floor acquires 3 units with large balconies just like the previous level. Along with a sky lounge with panoramic view.

CORE & CIRCULATION: The circulation and core consist of 3 elevators and a mechanical room facing each other. Along with 2 stair cores sharing the same bearing walls on opposite ends.

To communicate the residential aspect, balconies were added to all units in the tower except for the lower 4 levels on the NE corner. The balconies are partially recessed and partially extended past the glass façade. Residential units on the 3rd floor have access to large terraces recessed into the podium. The box framed by the metal panel breaks the glass pattern from the residential uses to shed light to the lounge with the skyview.
Facade & Material Study:
The concept blending typologies with glass tower differentiates the solid podium sets the change of level and eases the forming of the tower. The podium form has less glass features and is more enclosed with three corners coming to the ground. The NE tower corner is emphasized by a recess back to the ground floor canopy. The balconies emphasize the line of the tower as well. The weathering down of the podium corner enables the design to create a two story glass that interacts and activates the street corner. At the intersection of the alley, the podium corner continues from the top of the podium to the ground to simplify the form.

Unit Analysis:

Unit A: Consists of 2BD, 2 bath & dining/living space dedicated to a kitchen and dining area. A unique feature is spacious corner balcony with two different views of both sides of the streets.

Unit B: Consists of 2BD, 2 bath with a kitchen, living room, dining space. A distinct feature of the unit is the balcony which goes wrap around the corner like the others.

Unit C: Consists of 2BD, 2 bath & dining/living space dedicated to a kitchen and dining area. A unique feature is the spacious wrap around balcony enabling light to enter the apartment.

Unit D: This unit type is one of largest units which takes up a the whole corner of the building. The unit has a slightly curved floor plan that creates a peripheral panoramic view. The unit consists of 2BD, 2 bath and a kitchen, living room, dining space and dedicated family area.
COMMON SPACES:

Unique geographical context with framed wateresque views. The stepped slope acquires greenery that leads to the water. Some planters also have embedded seating.

Coordination of interior design, palette, materials and finishes follow high end luxury components.

The sky lounge atop the building has framed views of the city. The community spaces also accommodate kitchens to have a full service.

More unique features:

- Hotel-esque Amenities: Accommodates relish in panoramic vistas of Puget Sound, the Cascades Mountains and Downtown Seattle.
- Garden: Accommodates outdoor terraces on floor 16, skygarden.
- Restaurants: Accommodates various lounges and dinning services.
- Amenities: accommodates the world-class performances, live music, lectures and more in Olympic Tower’s 240-seat theater.
- Amenities: accommodates high-end salon and spa services from hair cutting and styling to skincare and massage.

15% of the gross building area is dedicated to the common spaces and amenities for the seniors. This percentage allows the diversity and quantity of the various amenities provided within the program alone.
EUROPE

- LOCATIONS
- DEMOGRAPHICS
- TRANSECT TYPOLOGIES
- CASE STUDIES:
  - 1. ELYSIAN RESIDENCES: THE OREN
  - 2. THE ELYSIAN RESIDENCES: THE LANDSBY
  - 3. DROMMEHAGEN
  - 4. GENERATIONAL CO-LIVING: THE EMBASSIES
  - 5. GENERATIONAL CO-LIVING: THE COLLECTIVE STRATFORD
Europe’s analysis of the senior housing market and which countries acquire more potential for growth, Savills formed a Senior housing opportunity index. The index compares 23 European countries through 17 metrics, which filters the demographics and statistics of potential and growth. This comparison and analysis identifies the best and the easiest senior housing market to enter and evaluates both private wealth and government old-age pension levels. The final results show that Germany, France, UK, Italy and Poland rank the highest five on the created index. Each country have varying prevailing drivers yet they classify the highest on the list.

Senior citizens aged 65 +

83% Feel satisfied with their life compared to 70% for the working-aged generation.

1 in 4 Feel they should move because their current home is no longer suitable for them.

2nd choice They would rather stay in their home by adapting it but senior housing would be their second choice.

47% Can save money but only 37% started planning or even thinking about the adjustment required.
Europe’s analysis of the senior housing market and which countries acquire more potential for growth, Savills formed a Senior housing opportunity index. The index compares 23 European countries through 17 metrics, which filters the demographics and statistics of potential and growth. This comparison and analysis identifies the best and the easiest senior housing market to enter and evaluates both private wealth and government old-age pension levels. The final results show that Germany, France, UK, Italy and Poland rank the highest five on the created index. Each country have varying prevailing drivers yet they classify the highest on the list.

1. GERMANY: At the top of the demographics potential, Germany has the largest elderly population (70-79 years old) and it will remain the largest in ten years time. The level of affluence amongst the elderly population is not particularly high compared to other countries benchmarked in this index but still stands above the average. However, with one of the highest saving ratio (17.3%), the third-highest behind Luxembourg and Sweden) germans have a greater ability to disinvest once reaching the retirement age. Germany benefits from a highly liquid property market and a matured residential market. Senior housing is not yet an established market. It is increasingly associated with care home residences enabling to accompany seniors throughout their later life by providing both care-intensive and non-care services as their needs change over time, whilst avoiding another move. The country offers strong potential for elderly demand, notably for lower care and affordable aged-restricted housing options.

2. FRANCE: Wealthy and fast growing elderly population. French seniors are relatively wealthy, enjoying a good income level, a high saving rate and a comparatively low housing cost burden ratio. They also benefit from a high level of old age government pensions. The French elderly population is the fourth largest amongst the 23 countries surveyed in this report but will become the second largest by 2029. The housing market is strongly tenant-friendly oriented. However, some of the tight housing regulations in France, do not apply to age-restricted residences. The senior housing model is growing fast thanks to a few large operators offering different types of concepts, going from urban and semi-urban apartments to out-of-town houses in senior villages, offering a wide range of services included in the rent or optional “à la carte”. Domitys, the market leader, has plans to expand into Spain, Portugal, the Netherlands, Germany, Switzerland, and Italy. France totals 620 senior housing residences, representing more than 47,000 units.

3. UNITED KINGDOM: Strong demographics and matured housing market. The senior population in the UK is the third-largest in Europe and it is expected to grow rapidly in the next 10 years. The median of seniors’ income is above average but the overall level of debt of British citizens is high and their saving rate is relatively low. The UK has the most liquid real estate market in which the residential segment is very matured and not overly regulated compared to other European countries. The senior housing model remains the least established of all age-restricted housing concepts. The vast majority (around 89%) of UK retirement housing is either sold as leasehold or let at social rents through non-profit housing associations. Yet, senior housing rental models are emerging. Since the financial crisis, the UK underwent the deepest fall in home ownership of any country in the EU. It is currently the fifth-lowest of the 24 countries benchmarked in this report. This, added to the fact that new flexible ways of living are gaining ground, the UK has strong potential for growing senior housing demand.

4. ITALY: Largest share of elderly people. Italy has the highest share of elderly people as a percentage of the total population. The size of the Italian senior population is also the second-largest across the 23 European countries. The level of affluence amongst the elderly population is not very high compared to other countries but in line with the average and the housing cost burden ratio is the third-lowest of the 23 countries, Additionally, old-age pension allocation provided by the Italian government is significant, the fourth-highest from their cultural background, Italian are very attached to their family and their home. Given the very large proportion of elderly people, there is no way that younger Italian are not going to care for, not just one, but three to four senior relatives. Traditions are slowly giving room to independence. A quarter of Italian aged 65 or over would consider moving to new accommodation in a senior housing residence enabling to accompany seniors throughout their later life by providing both care-intensive and non-care services as their needs change over time, whilst avoiding another move. The country offers strong potential for elderly demand, notably for lower care and affordable aged-restricted housing options.

5. POLAND: Fast-growing elderly population. Today, the share of senior people (aged between 70-79 years-old) in Poland, is the lowest out of the 23 European countries (6.82%) but the size of the elderly population, which is already the fifth-largest will more than double in the next ten years. Fast-growing elderly population combined with the lowest number of dwellings per inhabitant, make Poland a great prospective country for the senior housing market. The financial foundations of the elderly population is in line with the average but should gradually increase in line with their strong economy. Over the past 10 years, the amount of old-age pension per inhabitant grew faster than average, although it remains relatively low compared to the amounts allocated in western European countries.
TRANSECT TYPOLOGIES

EUROPEAN DOMINANT TYPOLOGIES

- RURAL
- SUBURBAN VILLAGE
- URBAN RING
- URBAN CORE

The TRANSITIONING location takes place in the urban ring just started to transcribe. The residents would rather stay connected to their previous life and reside in a community that offers similar day-to-day activities to its residents. Another trending option is GENERATIONAL CO-LIVING of the younger generation and older generation in the urban ring entourage.

The location is preferred by the developers and residents as they choose the site of the project based on the proximity to numerous hospitals, national attractions, parks and normal daily activities. The location is highly popular within the senior active residents since their lives aren’t relocated to the outskirts of the city.

The new trend takes place in the urban core to keep the community in close proximity to the parks and greenery as well as their families. The location is NOT the preferred location for senior housing projects.

Rural areas were NOT the preferred location for senior housing projects. The placement of senior housing in the rural areas are rare in Europe unless the project requires a hefty piece of land.

The PROMINENT placement of senior housing is in the suburban village. The chosen location when it first started and still prominent nowadays. Yet the preference has been transitioning to the urban ring and urban core. Location was chosen due to the isolation trend for housing and nursing homes. Along with the landscape proximity aspect.

European dominant typology started off by a design brought back from the USA. Therefore, it started in the suburban areas and developed to the urban ring. A rising common trend is generational co-living.

There is a lot of opportunity within the European countries for senior projects.
CASE STUDY 1
ELYSIAN RESIDENCE, OREN:


TYPE: 46 luxury apartments

SITE: 3 acre site area

DESIGN CONSIDERATION: Created for active seniors. Completion 2020

BUILDING: 46 appartments

AMENITIES: five-star restaurants, a rooftop bar, a full-service spa, a fitness center, an outdoor pool, hotel rooms, valet parking

ARCHITECT OF RECORD: Stanton Williams

LANDSCAPE ARCHITECT: BHSLA

INTERIORS: Interior Design Associates, Inc.

DEVELOPER: Ocean Land Investments

TYPE: 46 luxury appartments

AMENITIES: five-star restaurants, a rooftop bar, a full-service spa, a fitness center, an outdoor pool, hotel rooms, valet parking

LOCATION: Surrounded by national parks such as Belize park and Golders Hill park. Within close proximity to museums, Golders Hill Park Zoo as well as various ponds. Also within close proximity to Hampstead Health and Royal Free Hospital.

PROJECT GOALS:

MAJOR GOALS:

Community: Exterior amenities with hotel-style amenity and service spaces located at ground level.

Care facility: The units were designed as independent units that can be transformed into memory care and assisted living when the residents require more assistance.

Design: Modernist residential apartment building set within a landscaped site. The Oren building and landscape will aim to create an ambient and welcoming home for its senior living residents through appropriate scale, meticulous detail and use of materials.
**Design:**
The project is an arrangement of 4 separate buildings that all merge and connect to the courtyard gardens. The buildings forms also separate the gardens. Outdoor garden spaces are crucial for senior citizens which was a design consideration that developed in creating the separation of the residential buildings.

The structure divides and separates into four substructures that all link by “glazed, lightdrenched throughways” enabling each apartment to develop its own character. The separation also makes the units very unique from each other. The sun orientation also varies from building to building.

**Units:**
Sun orientation and views were both significant in the design of the units. The building is designed branched out from the ground level and merges on the upper floors creating the overall shape of the building.

The balconies/terrace are all inset the apartment which makes them covered.

**Appartments:**
The units have dual aspect with angled balconies designed specifically to maximize daylight, enable more privacy to the senior citizens and highlight the landscaped garden views. Each floor contain no more than 3 apartments engineered to promote neighbor engagement and community feel.

**Materials:**
A warm palette was chosen to reflect the welcoming and comfortable feeling within its senior citizens. Main material used included warm-toned brick and timber. These materials also create a low energy and sustainable building.

**Amenities:**
80% of the ground floor is dedicated to common areas and social activities. Amenities are situated on the ground floor to take advantage of the sun, light and tranquil garden views. The amenity spaces are mounted to open to the nature.

**Design challenges:**
Amenities designed and inspired by hotel style features such as the gym, swimming pool, treatment rooms, private hair and beauty salon and even a private medical consultation room.

** Fir:**
Spacious penthouse of the residence which consists of a large open plan living/dining room, 3BD Unit M11 is the second largest unit which consists of 2BD & 3 bath. A key feature in the unit is the wrap around terrace around the whole unit with a view. The unit floor plan was designed to all have access to the wrap around terrace from each room and open area.

**Argan:**
This unit type placed on the 2nd floor is one of the typical units. Consists of 2BD,1 bath, large dining/living space and closed kitchen. A unique feature is an additional study/reading area and a large balcony with landscape view.

**Elm:**
This unit type is a large unit which takes up a the whole corner of the building. The corner units are designed to have to allow a peripheral panoramic view. 3BD, 2 bath with a kitchen, living room/dining space and dedicated private terrace looking over the woodlands around the site. The unit floor plan was designed to have the bedrooms face the landscaped view.

**Legends:**
- Units
- Dining
- Amenities

**Site Landscape:**
The floor plans are arranged to all have views to the landscape.
- A promenade circulation around the courtyard garden.
- Zen garden around the property with embedded seating.
- Private Garden

**Program & Unit Analysis:**
Dimensions in meters.

**Units**

<table>
<thead>
<tr>
<th>Dining</th>
<th>Amenities</th>
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**Program & Unit Analysis**

- **LEGEND**
  - Units
  - Dining
  - Amenities

Dimensions in meters.
COMMON SPACES:

Unique geographical context with framed views to Belize park and Golders Hill park. Surrounded with numerous parks that create a foresty feeling.

Coordination of interior palette materials and finishes to be extended to exterior terraces to increase the indoor-outdoor feel.

The pool and amenities are created with a coordination of interior finishes to enable a zen surrounding.

15% of the gross building area is dedicated to the common spaces and amenities for the seniors. This percentage allows the diversity and quantity of the various amenities provided within the program alone.

MORE UNIQUE FEATURES:

Garden:
Accomodates outdoor terraces, garden courtyards and private gardens.

Event Space:
Accomodates indoor event space that can be rented out for public events.

Independent Living Units:
All floors: 46 spacious apartments dedicated to IL seniors that vary from corner units to regular units.

Restaurants:
Accomodates various lounges and dinning services.

PROGRAM & AMENITIES ANALYSIS:

AMENITIES:

Drawing Room
Spa
Massage
Pool
Community common areas
Skyview Restaurant
Fitness & wellbeing gyms
MAJOR GOALS:

Community: Exterior amenities with hotel-style amenity and service spaces located at ground level and rooftop.

Care facility: The units were designed as independent units that can be transformed into memory care and assisted living when the residents require more assistance.

Design: Modernist residential apartment building set within a landscaped site. The Landsby building and landscape will aim to create an ambient and welcoming home for its senior living residents through appropriate scale, meticulous detail and use of materials.

LOCATION: London Borough of Harrow, London’s Stanmore, UK

TYPE: 101 luxury apartments

COMPONENTS: five-star restaurants, a rooftop bar, a full-service spa, a fitness center, an outdoor pool, hotel rooms, valet parking

BUILDING: 101 apartments 220,000 sq. ft. of Amenities

SITE: 3 acre site area

DESIGN CONSIDERATION: Created for active seniors. Completion 2020

DESIGN ARCHITECT: Collado Collins

ARCHITECT OF RECORD: Collado Collins

LANDSCAPE ARCHITECT: BHSLA

INTERIORS: Interior Design Associates, Inc.

DEVELOPER: Ocean Land Investments

TYPE: 101 luxury apartments

PROJECT GOALS:

CASE STUDY 2: ELYSIAN RESIDENCE, LANDSBY:

Location: Surrounded by national parks such as Harrow on the hill. Within close proximity to Harrow School and Hartsbourne Country Club. Yet no hospitals in close proximity to the project site.
**Freesia:** Spacious 1BD and 1Bath with an open plan living/dining room and a kitchen. A key feature in the unit is a private balcony with a view.

**Bellflower:** Spacious 2BD with 2 walk-in closet and 2Bath with an open plan living/dining room and a kitchen. A key feature in the unit is a private balcony with a view.

**Iris:** The unit is designed on an open plan dining/living space with a closed separate kitchen. It's a 1BD with 1 Bath and a balcony. A key feature in the unit is a private balcony with a view.

**Jasmine:** Spacious 2BD with a walk-in closet and 2Bath with an open plan living/dining room and a kitchen. A key feature in the unit is a slightly larger private balcony with a view.

**Zinnia:** Spacious Penthouse A of the residence which consists of a large narrow open plan living/dining room, 2BD and 2Bath. A key feature in the unit is a spacious wrap around terrace around the unit. The unit floor plan was designed to all have access to the terrace with living/dining space located on the terrace.

**Laurel:** Penhouse B unit which takes up a the whole corner of the building. The corner units are designed to have to allow a peripheral panoramic view. 2 spacious BD, 2 bath with a kitchen, living room/dining space and dedicated private terrace looking over the site. The terrace extrudes more or less half of the unit as open seating area.

**Card Room:** Located on the first floor, overlooking the Art Deco entrance of the building. The room used for formal or informal games to the residents of the building.

**Salon, Offices, Consultation Room:** A luxury salon with hairdressing and beauty treatments. Private consultation rooms to host visiting medical professionals for residents.

**Rooftop Amenity Spaces:** The 6th floor houses the gym and fitness center, art room and the roof garden with views to London’s skyline. The rooftop garden/space is also used for Yoga and pilates. Gardening beds are located on the rooftop as well to grow various plants.

**PROGRAM & UNIT ANALYSIS:**

<table>
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<tr>
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**LEGEND**

- Units
- Dining
- Amenities
COMMON SPACES:
Unique geographical context with framed views to Osaka Bay to the south & inland Mt. Rokko. Outdoor & indoor courtyards that surround the units with waterscape features. A promenade circulation around the courtyard allowing different access points to the public amenities.

Coordination of interior palette materials and finishes to be extended to exterior patios to increase the indoor-outdoor feel. Public amenities placed on south side to maximize amount of sunlight. Interior design for luxury high end with large windows with courtyard garden views.

The dining within the building offers: The Abbey, The Bistro, The Grafton. The Abbey is located on the fifty third floor with a framed view of the famed Gold coast.

15% of the gross building area is dedicated to the common spaces and amenities for the seniors. This percentage allows the diversity and quantity of the various amenities provided within the program alone.

MORE UNIQUE FEATURES:
Restaurants: Accomodates various lounges and dinning services.
Rooftop Garden & Terrace: Yoga, gardening beds with views of London’s skyline.
Library & Common Area: Accomodates various lounges and dinning services.

PROGRAM & AMENITIES ANALYSIS:

Community Common Areas: Dedicated to congregate and promote the residents to come together.
Independent Living Units: Independent living units that vary from corner units to regular units.
Unit Common Areas: Dedicated to congregate and promote the residents to come together.
MAJOR GOALS:

Community: Exterior amenities with hotel-style amenity and service spaces located at ground level. An interior courtyard that forms to bring the residents together.

Care facility: The units were designed as independent units that can be transformed into memory care and assisted living when the residents require more assistance.

Design: High-quality, modernist residential apartment building set within a landscaped site. The Oren building and landscape will aim to create an ambient and welcoming home for its senior living residents through appropriate scale, meticulous detail and use of materials.

Drøbak – with its historic wooden buildings, squares and narrow streets, coupled with spectacular views of Oslofjord – is well placed to cater for new and innovative housing typologies that make the most of its stunning location, *Haptic*

The structure divides and separates into four substructures that all link by “glazed, lightdrenched throughways” enabling each apartment to develop its own character. The separation also makes the units very unique from each other. The sun orientation also varies from building to building.

LOCATION: Drobak, Norway

TYPE: Series of zigzagged mid-rise buildings

SITE: N/A

DESIGN CONSIDERATION: Created for active seniors 2016

BUILDING: Independent Living Units

AMENITIES: Ground floor restaurants, communal spaces, private terraces, parking

DESIGN ARCHITECT: HAPTIC

ARCHITECT OF RECORD: HAPTIC

LANDSCAPE ARCHITECT: SLA

INTERIORS: N/A

DEVELOPER: Competition

PROJECT GOALS:

Location: Maintaining a sense of community within the neighborhood. Alignment with surrounding hospitals and close proximity to the coast.
Appartments:
The units have dual aspect with angled balconies designed specifically to maximize daylight, enable more privacy to the senior citizens and highlight the landscaped garden views. Each floor contain no more than 3 appartments engineered to promote neighbor engagement and community feel.

Materials:
A warm palette was chosen to reflect the welcoming and comfortable feeling within its senior citizens. Main material used included warm-toned brick and timber. These materials also create a low energy and sustainable building.

PROGRAM & UNIT ANALYSIS:
Parking:
Numerous floors dedicated to parking which to my assumptions are created by the developers for use of the city and save a certain amount of spots for the seniors that still have access to their cars.
MAJOR GOALS:

Community: Community created with the first location in 2021 and, by 2026, we want to have 14 locations,” says Garde, Founder and CEO of The Embassies of Good Living, a Switzerland-based project launched in 2018. “By 2040, we want a network of 50 properties in the top cities around the world. The more locations we have, the better the experience.”

Care facility: A European developer aspires to create a high-end model he calls “coretiring,” appealing to elders looking to maintain a sophisticated lifestyle, even as their need for care increases.

Design: Residential apartment building set within a landscaped site. The embassies building and landscape will aim to create an ambient and welcoming home for its senior living residents through appropriate scale, meticulous detail and use of materials.
Seniors and younger generation all seek residences in the world’s great cities, or else they’ll live in pristine natural environments – close to the ocean, in the mountains – where key quality of life determinators are omnipresent.

THE EMBASSIES OF GOOD LIVING is a concept to increase and promote places for interaction. They are known and named EMBASSIES of the good life. It’s where visitors, guests and neighbours become good friends. Age segmentations should not be an isolation barrier yet a tool to promote co-living.

The apartment caters to numerous needs: single households, spaces for couples co-living. Every apartment contains flexible architecture, the floor plan if each unit ensures each can be amended to reflect its tenants’ lifestyle as well as personal preferences.

Improve quality time spent together as well as the opportunities for communication, and sense of community.
The individual rooms are compact. A typical unit is 12m² in area and consists of a bedroom, closet, small kitchenette and ensuite bathroom. All residents have access to a plethora of services such as a concierge, weekly linen change, room cleaning, wi-fi, and a simple all-inclusive bill for utilities, broadband and council tax. The residential component of the building comes hand in hand with co-working spaces. The Collective created a dedicated space looking like: an incubator for young start-ups that will also have access to the building’s numerous amenities. An additional gallery curated by the Bow Arts Trust as well as outdoor event space created to be able to be rented out to the public.

The building is configured as two connected volumes: a tall slender volume that addresses the urbanity and metropolitan scale of the High Street; and a lower volume that lowers to the conservation area of the adjacent side. “The masonry façade is conceived as a series of textural layers of varying depth that shift from light to dark as the building is perceived in direct or diagonal views”. The identity of the project is known by its collective event spaces, which forms the key feature. The overall design consists of a slender tall facade with elevated event space and communal terraces to bring the two generations together.

**PROJECT GOALS:**

**MAJOR GOALS:**

**Community:** Now the largest co-living space in the world, The Collective Canary Wharf has 705 rooms over 21 floors. It offers a new way to live, work, create a sense of community. Designed to foster community, it’s the future of city living.

**Care facility:** The residents help each other. The younger generation helps the older residents with day to day activities.

**Design:** Community spaces are strategically located to allow tenants to spontaneously encounter each other and socialize. The nature of social spaces, their layout and distribution throughout the building is perhaps the most important consideration of the project. Residents have access to a series of amenity spaces including a gym, sauna, library, cinema room, communal kitchens, outdoor hot tub and roof terraces.
The site forms an angle as the project starts as a direct extrusion. Lowering the northern mass to establish a slim tower towards the main high street. This creates a transition to the lower historical context to the north.

The corridor is heavily expressed on the façade which articulates the main volume into two narrow vertical masses. The front part of the facade is lowered to enable and create a roof top terrace with views towards the city.

The ground floor takes form to accommodate a variety of functions, including public realm, the building’s lobby, an event space, a gallery as well as the building’s service yard.

The two terraces draw the energy and vibrancy of the street throughout the building, establishing new peripheral views in the sky.

**UNIT & PROGRAM ANALYSIS:**

**Standard Unit:** Long studio 1BD with 1Bath with an open plan living/dining room and a kitchen. A key feature in the unit is the bedroom is the placed near the window and the bookshelf acts as a barrier segregating the open space.

**Comfy Unit:** The unit is designed on an open plan dining/living space, kitchen, 1BD with an ensuite Bath.

**Big Unit:** Spacious 1BD with en suite Bath with an open plan living/dining room and a kitchen. A key feature in the unit is a slightly larger room within the unit.
CONCLUSION

- TRENDS
- OPPORTUNITES
- SUMMARY

SILVER TSUNAMI UNIT

- BALCONIES AND PRIVATE TERRACES
- LIVING / DINING AREAS
- BEDROOMS
- INTERIOR CIRCULATION

CREDITS & SOURCES
SILVER TSUNAMI UNIT:

PRIVATE TERRACES:
Each unit houses a private outdoor balcony with framed views. In these cases, the views look over the main courtyard and another overlooking the city.

INTERIOR CIRCULATION:
Coordination of interior palette materials and finishes to be luxurious. Large windows to allow light to enter the corridors with hand rails placed to help guide the senior residents. Interior decoration and art pieces are tailored based on the location of the project.

LIVING / DINING:
Each unit houses a dedicated living/dining area with large windows to maximize the amount of sunlight entering the unit.

IL BEDROOM:
Each unit houses 1 or 2BD with hotel-esque interiors and finishes. Some rooms also have private access to the balconies.
**ARCHITECTURE DESIGN**
Design trends that are changing the market nowadays are senior housing projects that take place in the urban core. Projects booming in a vertical manner instead of a horizontal manner.

**PROXIMITY & LOCATION**
Site of projects are commonly chosen to proximity to national parks, bodies of water and hospitals. These aspects play a vital role on the senior community therefore, the projects leisure depends on them.

**TECHNOLOGY**
Coordination of technology is essential. The project should be up to date with technological devices and all the new wireless devices that can improve the quality of life of the resident. Wireless technologies capture vital signs and activity to allow physicians and medical teams to respond to individual’s needs in real-time.

**ROBOTICS**
Coordination of robotics to be used as an asset to future designs. Robotics have the potential to replace nurses and play a vital role in assisted living units. Interior design with integrated smart gadgets to facilitate and assist senior residents.

**FLOOR PLAN FLEXIBILITY**
Flexibility in the floor plans which allow future changes in case of needed permanent medical attention and care are essential for unit designs. The most successful trend in floor plan design is to create various units that be altered to allow the resident to age in place.

Modular components are used to create pop-up shops that can cater to events. Flexible amenity areas enabling greater variety of amenities & activities for the visitors & mainly the residents within the units.

**COMMUNITY**
Design trends that are changing the market nowadays are the hotel-esque interiors with a prominent outdoor-indoor feel. Strategic lighting enables more sun light to create better atmospheres. The majority of the seniors don’t want to feel left out nor feel old, therefore the design should acquire amenities that cater & attract the senior population.

**FITNESS & WELLNESS**
Fitness spaces are designed beyond a conventional workout areas. Wellness rooms are tailored to the location (example Japan: Ofuro spa). Offers additional indoor and outdoor areas that promote training, excercise and yoga sessions.

**MORE UNIQUE FEATURES:**
Interactive Floor Planner: enabling seniors to design their floor to their liking and personalize it. Choice between 1-3 bedroom layouts and furniture pieces to create the apartment to represent your lifestyle.

Enabling the residents to bring in their furniture or have the choice to choose. Amenities are tailored based on the location they take place since cultures play a key feature on the design.

**HOTELESQUE UNIQUE AMENITIES**
Design trends that are changing the market nowadays are the hotel-esque interiors with a prominent outdoor-indoor feel. Strategic lighting enables more sun light to create better atmospheres. The majority of the seniors don’t want to feel left out nor feel old, therefore the design should acquire amenities that cater & attract the senior population.

**NUTRITION & RESTAURANTS**
Series of variety of high end dinning, lounges and restaurants. Moving away from communal dining options such as cafeterias and transitioning into fine dining. It also allows for new interesting dinning concepts to take place.

**GARDENS, TERRACES & COURTYARDS**
Plethora of green spaces which consist of private and public gardens, rooftop greenery, terraces and courtyards. The series of greenery depend on the location as they are catered based on the location.
Overall, the baby boomer wave is an expected challenge that will rise within all countries at one point or another sooner or later. Within the baby boom tsunami, the middle to high-income seniors' expectations are booming, they are yearning for a community that provides hotel-standard amenities. The location is highly popular within the senior active residents since their lives aren’t relocated to the outskirts of the city. Preferred location by the developers and residents as they choose the site of the project based on the proximity to numerous hospitals, national attractions, park and normal daily activities.

The Japanese typology is known to be the birth location of the new trend of luxurious hotel-esque featured projects style. Slowly this trend has been taking over the senior housing development. The senior population also prefers and supports this typology. The majority of the models are linked to life leases. This contract does not necessarily mean for life, a leasehold that enables moveable rights or attractive termination clauses are more likely to be alluring to the residents.

The American typology is known to be the “campus/village” style but slowly has been changing to adapt to the preferences of the main population that’s concerned. Case studies within the research analyze the atypical up and coming urban core trending projects that exist in the US.

European dominant typology started off by a design brought back from the USA. Therefore, it started in the suburban areas and developed to the urban ring. Rising common trend is the generational co-living developing in the urban core and urban ring. The most common co-living concept lies within affordable senior housing and university student housing projects. Yet the upcoming co-living is an upgrade that combines the concept of Airbnb and co-living concept of two generations sharing the same building and common amenity areas.

The focus of this thesis research was to analyze the different typologies and models acquired throughout Japan, European countries and the United States of America. Up to today, there is no “one-size-fits-all” model that can be replicated throughout the world. With the analysis of senior living models of European countries, Japanese models and American, new models will be developed going forward especially with COVID-19. Due to the unprecedented event, new design ideas will take place that may be more attractive to both senior residents and developers.

As of right now, this pandemic will change the future of the senior housing design approach for a model to help avoid the spread of a pandemic and promote social distancing. “The senior living community of the future will be designed with these scenarios in mind, and create ways for providers to support these technologies and minimize future disruptions.” (Regan, Tim. “How Covid-19 Is Shaping the Future of Senior Living Architecture and Design.” Senior Housing News, Senior Housing News) Challenges that will shape the future designs and multifacets of senior living are security challenges, bed capacity challenges and food services and dining challenges.

1. SECURITY CHALLENGES – Communities are facing issues to protect the building perimeters. Planning ways to create entry and exit points to screen staff and visitors such as healthcare professionals, family members and other staff members.

2. BED CAPACITY CHALLENGES – Communities are facing challenges in accommodating an influx of baby boomers, either seeking immediate care or seeking protection in this scary time. This influx has exacerbated existing capacity constraints. Communities are challenged in providing isolation suites when needed and suquester bed-ridden seniors that require care. Certain solutions are temporary such as the bed expansions to surrounding hotels.

3. FOOD SERVICES & DINING SERVICES CHALLENGES – Dining rooms, restaurants, lounges and more food services have been reduced in use, if not abandoned altogether to promote social distancing and avoid the spread of diseases. Grab-and-go meals; made their way into the hospitality realm as a temporary solution to the pandemic. This also opens the opportunity for developers to bring in interesting dining concepts which could generate additional revenue in the future.

Yet the pillars of the new senior housing trend are flexible floorplans and unique features within the urban core which to my assumption would remain and become more developed.


Starene Stanovništva u Japanu. repozitorij.pmf.unizg.hr/islandora/object/pmf:8268/datastream/PDF/download.


"兵庫県神戸市の中介付有料老人ホーム - サンシティタワー神戸." SunCity, hcm-suncity.jp/suncity/kobe/gallery.html.


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