Solar Orientation

The solar angles are 70 degrees June 21, 45 degrees September and March 21, and 25 degrees December 21. The solar azimuth is 60 degrees December 21, 90 degrees on September and March 21, and 120 degrees on June 21. The entire 1600' length of the rectilinear site is open to the southern solar exposure. This solar orientation, combined with the sloping site, will generate natural light and energy conservation.
SOLAR PATH 44  NORTH LATITUDE
Views From The Site

The area provides a panoramic view across and along the Willamette River. The Cascade Mountains can be seen on the western horizon, and Mt. Hood can be seen on the eastern horizon. To accentuate the scenic views, the architecture will utilize spatial advantage and visual connections to the surrounding natural environment.
Views Onto The Site

The views onto the site are visually screened by the perimeter foliage. This will enhance psychological security and seclusion, and will allow the elderly the freedom of movement without being visually observed by strangers. The views from Willamette Drive are open on the northern edge of the site, and closed to the remainder of the site. This natural occurrence will define entry, and also shelter the rear of the site adjacent to the river.
VIEWS ONTO SITE
Neighborhood Context

The neighborhood context is that of one family residential units. There is only one vehicular entry onto the site, located along Willamette Drive. Portland is ten miles to the north, and Mt. Hood National Forest is twenty-five miles east. Vehicular traffic will probably enter the site originally from the north, or Portland direction. Pedestrian access is limited to walking through and around the perimeter foliage.
Noise

The residential neighborhood context will limit the noise level around the site, and therefore noise will not be a major site design factor. The vehicular noise level is minimal, due to the rural area. The low levels of noise will be further buffered by the foliage. The splashing, trickling river tones should enhance rest and relaxation.
Walking Distances

The physical size of the area reduces walking distances to less than ten minutes from anywhere on the site. The walking distances will encourage exploration, and will challenge the elderly to enjoy the natural environment. The adventure and intrigue of exploration will physically and mentally stimulate the elderly.
FORM

Now that the primary needs of the independent elderly have been established, and a suitable site has been chosen and analyzed, attention must now be directed toward developing architectural models and prototypes that will advance the notion of physical and mental challenge for the aging. The objective of this exercise is to determine the best location for the interior and exterior spaces, as well as defining physical features of the architectural forms and spaces. These constructs and programming guidelines will serve as visual patterns, which will be assembled to formulate the final architectural synthesis.

Architectural Zoning

The architectural design must rely on a network of visual connections to social interaction and activity. The relationship of spaces will enhance this notion, challenging the elderly residents to become mentally and physically active. This scenario
of visual connections will also begin to establish a spatial link, producing an arrangement of natural light and primary views of the Willamette River. The spaces should be linked in a centralized fashion, reducing walking distances for the elderly residents, and increasing the capability to provide visual
links to activity. The interior spaces are to be located next to the northern foliage. This location will provide maximum solar exposure, allow summer breezes to flow freely, and will produce a buffer against winter winds. The exterior spaces will be near the southern foliage for summer shade.
Spatial Arrangement

The spatial arrangement is based on a community thoroughfare, with housing and activity areas located adjacent to the pedestrian path. This scheme will provide visual access to the flow of activity from private and public spaces, challenging the elderly to become socially involved. The physical alignment of the architecture will produce a spatial sequence, highlighting spatial vistas along and across the path. Area one will include the post office, library, community calendar, management offices, and the atrium lobby. The second activity center will include the cafe, bar, reception services, and community meeting hall. The third social node will include the game room, exercise room, arts and crafts studio, viewing balcony, and the community greenhouse. Area one will be called the Community Center, area two will be called the Town Square, and area three will be called the Arts Terrace.
Architecturally Defined Space

The architecture will be utilized to enclose and define the major activity areas, and the pedestrian path. The social activity and learning environments include the Community Center (1), the Town Square (2), and the Arts Terrace (3). These community focal points will be designed as spatial nodes along the neighborhood avenue, and the adjoining exterior spaces will be created by spatial apertures.
Circulation

The pedestrian path will be clearly outlined with housing and activity areas, making exterior circulation effortless for the elderly residents. The primary circulation route will connect the exterior nodes and social activity areas, and the secondary circulation will link the primary path with the architectural entries. The path configuration conforms to the rectilinear restrictions of the site, and allows the older person to roam freely, unconcerned about becoming lost or disoriented. This psychological security will stimulate exploration and adventure.
Architectural Hierarchy

Each of the primary social centers will be accentuated by diverse architectural forms. The architecture of the elderly housing will be similar in composition, further exploiting the diversified architecture of the activity nodes. This architectural hierarchy will make it easier for the elderly to recognize the social spaces from a distance.
Interior Spatial Arrangement

The purpose of this scenario is to give each individual in the space a primary, unobstructed view of the exterior. Each person has a similar visual connection, without occupying the same space. In a normal spatial arrangement, the principal spot would be next to the window. However, the elevated rear space also becomes an advantageous zone. Not only does this environment produce mental exhilaration, it also provides physical stimulation and seclusion. The furniture is located next to the window to intensify the visual link to the pedestrian path.
Exterior Seclusion

The pedestrian path should allow for seclusion and privacy, permitting the elderly to mingle or retreat. One is granted the opportunity to watch others walk by, while at the same time remain hidden. This unobtrusive observation will challenge the aging to socially interact. Each space is provided a different vantage point of the adjacent environment.
Nature Confining Space

Nature, as well as architecture, can also act as a spatial envelope. One may utilize trees, rocks, and water to frame a scene or enclose a space. Natural elements may also focus a vista, or define a nature trail or path.
Interior Vantage Points

An interior public space must provide multiple vantage points that focus on interior objects or spaces. This notion will make a space just as vital and active at night as it is during the day. For example, if a private living space focused on the pedestrian path during the day, and a fireplace at night without changing the spatial configuration, the living space would remain continuously active throughout a twenty-four hour period.
Visual Layering

The essence of layering is to provide a visual screen separating the observer and the activity, utilizing trees or pergolas. This layering process will challenge the observer to become active, and the seclusion equips the older person with the freedom of non-surveillance. Layering also creates private space on a public scale, territoriality, and negative space for patios and gardens. The pergolas act as a buffer zone between the pedestrian path and the living units, providing the psychological security that a stranger must first step into a private zone before reaching the door of an elderly person's condominium. Pergolas also shade the summer sun, and establish a space to exhibit plants and flowers. Another advantage is the integrity of structure, and a simple expression of the post-n-lintel character of Pacific Northwest architecture. This integration of structure and space will aid in future adaptability, granting the elderly residents the option of future building additions.
ARCHITECTURAL SYNTHESIS

The essence of the final architectural design is an attempt to integrate need, context, and form. The development of guidelines and criteria for design has produced a compilation of architectural concepts and solutions that will enhance old age. The goal of this architectural project was to determine the primary issues involved, and to develop a solution that would adequately respond to the specific needs of the independent elderly. This particular architectural design was based on challenging the elderly to become physically and mentally active through visual connections to social interaction. The remaining annotated diagrams will describe the architectural synthesis, and define the primary issues that have influenced the resolution.
Site Plan

The final architectural design includes forty (40) condominiums, a community center (1), a town square (2), and an arts terrace (3). The community center is comprised of the management offices, library, post office, lounge, atrium, conference room, and exterior balcony. The town square is a compilation of a cafe, bar, kitchen, reception center, and community meeting hall. The arts terrace includes a game room, exercise room, balcony, arts and crafts studio, and community greenhouse. The design is based on a pedestrian path, and a spatial sequence of vistas. The activity nodes are connected by the main thoroughfare, and all the architectural spaces overlook the Willamette River through the utilization of spatial advantage. All of the housing units face the southern exposure, the scenic view of the river, and the cove that penetrates the site. The cove acts as a focal point, a nature trail, and a boat dock. The exterior activity spaces, and the pedestrian path, are both defined by the architectural arrangement. The interior spaces provide visual links to the street activity, and the river basin. The primary activity nodes are accentuated by diverse architectural forms, and the site layout is nestled between the deciduous and evergreen trees that border the site.
North-South Site Section

The site section provides greater detail as to how spatial advantage, visual layering, and exterior seclusion are utilized to challenge the aging. As one moves along the pedestrian path there are exterior patios and seating niches, defined largely by trees and parapet walls. The pergolas act as a layering device, creating territoriality and psychological security. The pergolas also shade the windows of the south facing portions of the living units. The two-story living unit is an example of spatial advantage, as the elderly resident is drawn to the exterior balcony to enjoy the scenic views. This physical and mental enticement will stimulate the older person to climb the stairs.
Community Center

The community center will be a focal point of social interaction. The spatial aperture will increase the excitement of arrival, and the circular atrium will pronounce the building as an activity area. The balcony above the atrium offers the elderly a viewing station to unobtrusively observe the flow of people along the pedestrian path. The atmosphere of movement and energy will attract the residents.
Town Square

The town square also offers adventure and intrigue, as the spatial vista opens up into an exterior cafe. The smell of food, and the excitement of active people, will challenge the older person to mingle or casually observe the activity from a visually secluded spot. The cafe is distinguished by the undulating form of the balcony, which also acts as a shading device for the exterior cafe. The path is outlined by a combination of natural and man-made architectural elements.
TOWN SQUARE
Arts Terrace

The arts terrace is a location of final arrival, where the elderly are enticed to discover the game room, community greenhouse, or arts and crafts studio. The three buildings help to create an informal courtyard, which opens up to the scenic views of the Willamette River. The rooftop balconies and seating niches allow one to sit and watch the flow of activity. The spatial arrangement accentuates the feeling of entry and reception. The residents can walk along the arts terrace and see the interior activity through the window walls.
Interior View of Community Center

The interior balcony and atrium of the community center offers a wide range of vantage points. One can look down at the interior social activity, or look out the window at the exterior activity. The community center also allows one the advantage of moving about without being seen. The spatial advantage of the balcony will physically challenge the aging to climb the stairs up to the terrace. The community center becomes an energetic focal point, as the residents enjoy the educational and work environments.
Community Greenhouse

The community greenhouse provides a positive work atmosphere, while at the same time generating social interaction. One can relax and read, visit old friends, or meet new friends. The interior space is designed around an elevated rear space, which allows casual observers to pass through the greenhouse unnoticed. This provides both spaces with a panoramic view of the adjacent Willamette River.
Typical Living Unit

The typical housing unit is designed around the concepts of spatial advantage, interior and exterior focal points, and an open and unobstructive floor plan for future adaptability. By elevating the bedroom above the main living space, the elderly will enjoy the advantages of an open floor plan, combined with the privacy of a visually secluded bedroom. The elevated bedroom will provide physical stimulation without over exertion, and an unobstructed view of interior and exterior spaces. The furniture of the main living space is centered around the primary view of the pedestrian path, which will act as a challenging stimulant during the day. At night, the fireplace will become the focal point of the condominium.
Final Conclusions

This architectural design was founded on the premise that the elderly would enjoy the adventure and intrigue of traveling to a resort community. It was conceived as an environment that would entice the aging population to enjoy nature, physical activity, and social interaction. Although no architectural solution will ever be perfect, I hope this research project has at least integrated new ideas and concepts into three-dimensional space.
APPENDIX

Bibliography

Conclusions and Translation into Architectural Design

Focused Interviews

Visual Questionnaires

Post Occupancy Evaluations
BIBLIOGRAPHY


Barker, James F. *The Small Town as an Art Object*.


Conclusions and Translation into Architectural Design

The objective of empirical testing in architecture is to establish guidelines and criteria for future design. Through the use of post occupancy evaluations, questionnaires, and focused interviews, a sensitivity for user needs and expectations will develop. After observations and interviews with the elderly, administrators, and gerontological experts, important issues have been raised. Many of the primary concerns have already been well documented: enhancing social interaction, integration with nature, unobtrusive surveillance, psychological and physical security, recreational choice, and independence. Yet the purpose of research is to develop new facts, and to establish and discover new issues. The most significant new conclusion is that the elderly must be challenged to become active. This objective can be accomplished through knowledge advancement (mental challenge), work or recreational activity (physical challenge), and visual connections to social interaction.

Mental challenge is a unique opportunity to allow the elderly to learn new things. Many older people would enjoy learning how to paint, play pool, play cards, or write a newspaper. These specific goals would provide knowledge advancement, and would challenge the aging to become mentally active. Far too many nursing homes for the elderly have been designed with a total disregard for this issue. Architects must believe that the elderly enjoy retreating to a cold, white hospital ward, for that is what they continue to design and build. I have yet to meet anyone, other than rich doctors, who like hospitals. New colors and shapes could go a long way to enhance congregate living for older people. Another idea might include exposing colored mechanical and structural equipment in an elderly environment, which might stimulate the older people to learn some of the building components of architecture. Another scenario might include the notion of arranging a school environment, where the elderly advance after accomplishing new tasks. Many older
people were unable to get their high school diploma or attend college, and correspondence courses could be provided to accomplish these mental tasks. The aging person would be rewarded for learning, and encouraged to continue. The bottom line is that the elderly are still alive, and it isn't difficult to provide environments that enhance old age through an appreciation for education and intellectual stimulation.

Physical challenge can also stimulate and rejuvenate the aging. Many of the elderly I talked to enjoyed taking vigorous walks outdoors, yet they were deprived of this basic exercise. Nature has a keen ability to invoke memory, and therefore outdoor space is a required element of design. These outdoor spaces should include private and public space, and should provide a partial view back to the residence or community focal point, for orientation and security. Another physical activity is the cultivation of plants, and the therapeutic value of a community greenhouse. A community greenhouse would provide a physical work environment, while also producing social interaction. A community greenhouse would challenge the elderly to become physically and socially active. Architecture for the aging should also include interior space penetrated by natural light, because the warmth of the sun can also act as a physical stimulant. The elderly should also be encouraged to join in organized activities: picnics, traveling, and sporting events. The older person still enjoys getting out for special events, but it must be well organized in advance so that the older person will have plenty of time to prepare. The elderly like to be involved, yet they need the security of caution and forethought. The aging population still loves riding horses, swimming, and riding boats. The simple fact is that the elderly can still delight in physical activity that is well controlled and organized, and therefore physical stimulation is essential to any future architectural design for the aging.

Although one can provide physical and mental stimulation for the aging, that doesn't insure the elderly will become actively involved. The elderly must be challenged to become active through visual connections to social interaction. All
of my research and empirical testing has led me to believe that providing a visual link to activity is the primary issue in producing challenging environments for the elderly. It is well documented that the elderly, and people of all ages, enjoy watching other people. Going to the beach has become a twentieth century phenomena of watching other people. The elderly thrive on visual observation, due largely in part to the fact they aren't as physically active as they were at a younger age. When you walk into a nursing home it is very common to see many of the residents hanging out around the entry so they can survey the movement and activity. And I feel this issue is the key to architectural design for the aging, because all old people love to watch other people. If you walk into a shopping mall you will most likely find the elderly sitting on the benches watching other people walking around the mall. If one visits a playground, one is almost assured of finding an older person watching the children playing. One architectural solution is to provide guest rooms for visiting grandchildren, and playgrounds for neighborhood children to utilize. Visual connections can be linked to game rooms, bars, cafes, swimming pools, and outdoor physical activity. This type of visual connection to activity will challenge the elderly to become mentally and physically involved. The best analogy is that of the front porch, which allows a person to unobtrusively survey the street and sidewalk activity, without being forced to join in. In order to challenge the elderly to become involved in physical and mental stimulation, architecture for the aging must first provide a visual connection to social interaction and activity.
Focused Interviews

Interview: Betty Leary, Administrator, Wheatfield Village
TUESDAY 9/5/80

1. What do you consider a challenging environment for the independent elderly? LEARNING PROGRAMS, F 4K ACTIVITIES, SWIMMING POOLS, SOCIAL OUTREACH, PARKS, WORK ACTIVITY (CONCEPT OF VILLAGE STORE, SELF-SUFFICIENCY), THE ELDERLY LIKE TO BE NEAR ACTIVITY, THE ELDERLY LIKE TO HANG OUT ACROSS FROM A WINDOW TO WATCH ACTIVITY

2. What is the best way to enhance social interaction among the independent elderly? CAN TEND TO CERTAIN ACTIVITIES, FOR EXAMPLE WESTMINSTER RESIDENTS TAKE TRIPS TO CINCINNATI LET'S GAMES, RESIDENTS LIKE TO WALK ON DWELL TRAIL AND LOOK AT POOL, LIKE PICNICS AND GOING TO PARKS, NEED TO THE ELDERLY LIKE TO PARTICIPATE, BUT THEY NEED A NUDGE OR INVENTIVE, THEY LIKE THINGS TO BE ORGANIZED OR THEY HAVE PLENTY OF

3. What do you consider a therapeutic environment for the independent elderly? PEOPLE NEED TO GET OUTSIDE, THEY NEED TO ENJOY NATURE, AMBIENCE, ACTIVITIES ARE IMPORTANT, BE NICE, THE ELDERLY ENJOY NATURE, GARDEN, NATURE NEED TO BE TRIMMED TO PREVENT GROWTH, CAN BE SPACES, NEED TO HAVE MEMORIES - OLD TIMES, OLD APPOINTMENT, OLD TENT, OLD FURNITURE, PICTURES, MEMORIES, PLANTS, NATURE (WINGS)

4. What is the most important factor in design for the independent elderly? LEAVES RATHER THAN WATER, WIND, INDEPENDENCE, MEMORIES, SECURITY, OLD FRIENDS TO TALK TO, MUST MAKE UP FOR SENSORY DEPRIVATION & LOSS OF MOTOR SKILLS, PROVIDE EASY ACCESS TO OLD TIMES, THAT FAMILY CAN SEE PLACES ON THEIR OWN, MEMORY LENSES, VISTAS, CARE MEDICAL FACILITIES, MUST GET OUTDOOR SPACES, SECURE & SECURED ENVIRONMENTS, ALLOWING FOR NATURE WOULD BE NICE, ALSO FOR FAMILY TO VISIT TO THE HOME, LONG CORRIDORS, FEELING OF COMMUNITY, MUCH ALLOCATE SPACE FOR TANG
Focused Interviews

Interview: Gary Meunier, Director, Boson Office of Gerontology

Friday Sep. 19, 1986

1. What do you consider a challenging environment for the independent elderly? The elderly need challenge (asked to come back to this question later), elderly need nature and well-lit spaces without glare. Need to watch activity. Need programs & organized activity. Need to facilitate choice. Distance can be damaging.

2. What is the best way to enhance social interaction among the independent elderly? Need to observe and watch other people involved in activity. Like to watch children play. Grandchildren can help to get the elderly involved.

3. What do you consider a therapeutic environment for the independent elderly? Must maintain independence. Must be able to do things for themselves. Social activity, work environment.

4. What is the most important factor in design for the independent elderly? No secondary entries to private rooms for security. Basically no back doors. Outdoor sitting areas, wider streets, parking spots for elderly drivers, large step signs & direction markers. Queued entries. Personalized territories, personal spaces. Elderly want & need the same thing as young people do. Nobody likes prisons, barracks, or hospital ward environments. Must make up for hearing & vision loss. Don't want to ever stimulate the elderly. Head drops as you age. Windows need to have lower sills.
Focused Interviews

Interview: UNIVERSITY SCHOOL IN TREATMENT OF ELDERS

THURSDAY 4:00 P.M.

1. What do you consider a challenging environment for the independent elderly? The elderly need an environment where they feel safe and comfortable. They do not like to break their routine unless it is an organized event. Elders need social interaction at all levels, either in activity or movement, inclusive social networks.

2. What is the best way to enhance social interaction among the independent elderly? Travel can be very helpful around the U.S. or a nearby home after they retire. Travel can be difficult for older people, so it has to be done without stress. It can make or break many people's desire to experience new things, including the enjoyment of beauty.

3. What do you consider a therapeutic environment for the independent elderly? Therapeutic, therapeutic, and more therapeutic! The elderly need to feel relaxed and cared for. They need a community where they can be appreciated and meet others. The environment should be safe, restful, and comfortable.

4. What is the most important factor in design for the independent elderly? Most design for backward reality: The elderly need an environment where outdoor access and privacy are essential. They also need outdoor access to private areas for security. They need to feel safe and secure in their environment.

I don't want the elderly to feel isolated. I want them to feel included. I want them to feel valued and appreciated.
Interview: 45 EMERALD VALE, LONDON, ENG
SUNDAY NOV 14, FIE

1. Do you feel that providing a view back to your apartment or
residence would allow you the freedom and security to explore
the outdoors more frequently? Yes, it would make me feel more
comfortable, it would give me more time and more freedom.

2. Would you enjoy maintaining a community greenhouse? Yes, very much.

3. Do you feel it would be nice to live in spaces that allow
natural light through skylights and large windows? Yes, it is nice
to feel the warmth of the sunlight to look outside and see
friends and people, but they want what the sun in their eyes, so
need to feel shaped nice.

4. Do you feel this space, and the primary view of the swimming
pool, would increase your desire to go swimming? Maybe, but might
increase the chance that you not swim. They like the space
because they can watch other people swim, their grandchildren
can swim there and watch them, they don't care where the
furniture is placed. Important, light to watch. Need a deck to get outside

5. Is it important for you to be able to survey social activity before you decide to join in? Yes, you want to see if your friends are there, then you know why

6. Is it important to provide spaces that are secluded, yet can
be partially seen from your apartment? Yes, that would allow them
to be outside for security and time. They like the view around
the main area so they can see it at mark. They feel this
space because it's nice that the first which needed help
1. Do you feel that providing a view back to your apartment or residence would allow you the freedom and security to explore the outdoors more frequently?
2. Would you enjoy maintaining a community greenhouse?

3. Do you feel it would be nice to live in spaces that allow natural light through skylights and large windows?
4. Do you feel this space, and the primary view of the swimming pool, would increase your desire to go swimming?
5. Is it important for you to be able to survey social activity before you decide to join in?
6. Is it important to provide spaces that are secluded, yet can be partially seen from your apartment?
<table>
<thead>
<tr>
<th>Observational Topics</th>
<th>Notes and Sketches</th>
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<tbody>
<tr>
<td>Measurement of space(s)</td>
<td>120 Residents 24 Staff Alzheimers Facility</td>
</tr>
<tr>
<td>1 Breadth</td>
<td></td>
</tr>
<tr>
<td>2 Width</td>
<td></td>
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<td>3 Height</td>
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<td>4 Door/position, size</td>
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<td>5 Windows</td>
<td></td>
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<td>6 Other</td>
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<td>Context of space(s)</td>
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<td>11 Special features</td>
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<td>12 Fire exits</td>
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<tr>
<td>13 Other</td>
<td></td>
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<tr>
<td>Activities/arrangements</td>
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<td>14 Furniture and equipment</td>
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<td>15 Radii of seeing and hearing</td>
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<td>16 Planes: demarkation</td>
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<tr>
<td>17 Levels</td>
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<td>18 Other</td>
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<tr>
<td>Management</td>
<td></td>
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<td>19 Visual control</td>
<td></td>
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<tr>
<td>20 Organizational needs</td>
<td></td>
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<td>21 Maintenance needs</td>
<td></td>
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<tr>
<td>22 Other</td>
<td></td>
</tr>
<tr>
<td>Comfort Level</td>
<td>Profile</td>
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</table>

- No seclusion space, all open.
- Half wall that separated dining to comm. space was nice, had planter full of plants, but didn't do an good job of separating spaces, too noisy a kitchen.
- It was around one o'clock & mould in dining or community space except for wall of flower wall.
2 TECHNOLOGICAL ASPECTS

observational topics

1 Walls
2 Floors
3 Ceilings
4 Openings
5 Levels/stairs
6 Details
7 Fire ratings
8 Other
Building Systems
9 Structural Geometry
10 Load-bearing
11 Non-load bearing
12 Heating/Cooling
13 Lighting
14 Ventilation
15 Adaptability
16 Flexibility
17 Automatic/Special systems
18 Special equipment/fire
19 Other
Management
20 Maintenance
21 Control
22 Other
Comfort levels Profile
23 High [] medium [] low []

notes and sketches

KINDLY SEE ANY VISITORS OR SOCIAL INTERACTION

advantages
disadvantages

NURSES/STAFF/DAY ROOM

LED ROOMS WERE BRIGHT AT 875 Lux
LIKE HOSPITAL ROOMS
ONE WINDOW, BEDS SEPARATE BY CURTAIN
NO INDEPENDENCE, ALL CHANGING IN ROOMS NO MAKING AROUND NEEDS
ALL EXITS WERE LOCKED BY STAFF TO PREVENT ALZHEIMERS PATIENTS FROM ESCAPING
ALL ROOMS WERE BROWN ENAMELS, EASY TO BURN BUT NOT NICE TO LOOK AT
MOISTURES WERE ALL LEAKING THE OLD CEILING HAD A HOLE TO TRIP ON
ALOT OF STAFF FOR HEATING/COOLING CONTROL OF ALZHEIMERS EQUIPMENT WERE HIDDEN
NO DIFFERENT LEVELS

* HAPPY ACCIDENT: ONE PATIENT WOULDN'T HAVE ALZHEIMERS TRIED TO "SNEAK AN ALZHEIMERS PATIENT OUTSIDE!" BUT THEY WERE CAUGHT BY STAFF, LAST CASE FOR ME, IF I FEEL SOMEONE SHOULD HELP THEM GET OUTSIDE, BUT THERE WERE 11 PATIENTS.

* SHAKES HAD NO LIGHT INTEGRATION OF NATURE, MOST ROOMS HAD CLOSE ENOUGH.

* ENTRY & COFFEE AREA WILL ASSIST "..."
<table>
<thead>
<tr>
<th>People Types</th>
<th>Observational Topics</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Receiving services; residents, participants</td>
<td>Seemed to be plot of staff</td>
</tr>
<tr>
<td>2 Providing services; admin, staff, experts</td>
<td>Do visitors or guests but me</td>
</tr>
<tr>
<td>3 Visitors; guests</td>
<td>Ages 65-95</td>
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<td>4 Non-Visits; passers through</td>
<td>Marital 90%,Write 90% female</td>
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<td>5 Other</td>
<td>Orientation</td>
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<tr>
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<tr>
<td>6 Age</td>
<td>Complex uncertain, need for signage,direct</td>
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<tr>
<td>7 Gender</td>
<td>7 Need for visual, language</td>
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<td>8 Visible disabilities</td>
<td>8 Social vision to others</td>
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<td>9 Color</td>
<td>9 Other factors</td>
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<tr>
<td>10 Language/ethnic group</td>
<td>Socio/Physical Perform</td>
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<tr>
<td>11 Other</td>
<td>10 Light/dark</td>
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<th>Observational Topics</th>
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<tbody>
<tr>
<td>12 Individuals/couples</td>
<td>11 Quiet/noisy</td>
</tr>
<tr>
<td>13 Groups</td>
<td>12 Isolated/integrated</td>
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<tr>
<td>14 Friends</td>
<td>13 Active/passive</td>
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<tr>
<td>15 Family</td>
<td>14 Societal/sociofugal</td>
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<tr>
<td>16 Strangers</td>
<td>15 Warm/cold</td>
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<td>17 Other</td>
<td>16 Other</td>
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<table>
<thead>
<tr>
<th>People Roles</th>
<th>Observational Topics</th>
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<tr>
<td>18 Performer/spectator</td>
<td>User response to space</td>
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<td>19 Active/passive</td>
<td>17 User changes to setting</td>
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<td>20 Other</td>
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<th>21 User, decoration</th>
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<td>22 User anger, ness</td>
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<td>25 User comprehensiveness</td>
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Revised June, 1986
Please call the Office of Research at (317) 246-3704 if you have any questions. If you have any questions, please call the Office of Research, 1825 Riverside, for receipt or later than 5:00 p.m. on the date specified on page 1 and above, whichever is applicable. If you have any questions, please return one copy of the proposal (with cover and budget pages attached) to the Office of Research, 1825 Riverside, for receipt or later than 5:00 p.m. on the date specified on page 1 and above, whichever is applicable.

Project Title: The Creation of Genetically Modified Environments to Potentially Habitat

Dates and titles of any grants received previously:

Department: Architecture
Advisor's Telephone: 285-1911
Faculty: Architecture
Advisor: Menendez
Minor: Architecture
Street, City, State, Zip Code (optional): 47344
Indiana
Muncie
Campus Address: 3903 N. Meridian Rd. - Apt. C
Telephone: 284-6928
Classification: Senior

Name: Michael W. Halstead

Proposal Cover Page
1986-87 ACADEMIC YEAR
UNIVERSITY RESEARCH COMMITTEE
UNDERGRADUATE RESEARCH GRANTS

Signature of Department Chair

Signature of Faculty Advisor

Signature of Applicant

Please call the Office of Research at (317) 246-3704 if you have any questions. If you have any questions, please call the Office of Research, 1825 Riverside, for receipt or later than 5:00 p.m. on the date specified on page 1 and above, whichever is applicable. If you have any questions, please return one copy of the proposal (with cover and budget pages attached) to the Office of Research, 1825 Riverside, for receipt or later than 5:00 p.m. on the date specified on page 1 and above, whichever is applicable.
Identification and Introduction:

The concept of environmental therapy displays the fundamental belief that the proper atmosphere is capable of positively stimulating the elderly. This basic notion in design for the aging is easily understood and widely accepted. However, in common business practice the architects of today have avoided this issue. Having served my architectural internship at Wilson and Associates, an architecture firm specializing in nursing homes for the elderly, I have discovered this fact personally. Most nursing homes are designed primarily with cost-efficiency in mind, with absolutely no concern for the older inhabitants. The interior spaces are unimaginative and bare, while the outdoor areas usually consist of a parking lot and trash removal. Therefore, it is imperative that architects become actively involved in providing better care for the aging.

Review of Literature:

This problem of creating the proper environment for the elderly has intensified with the advancement in medical technology over the past century. As B.F. Skinner points out in his book *Enjoy Old Age*, it is good that old people are living longer, but if they are not enjoying their lives, they have not gained a great deal. As this concern for longevity increases, we also find that the elderly of today are a far different social group than the elderly of tomorrow. The baby boom generation is more health oriented than past generations; therefore, architects will have to anticipate the needs of future old people who will live longer and more active lives. As is the case today, the elderly must not be removed from the mainstream of life. The psychoanalyst Alfred Adler argues that there are three basic life tasks with which a person must deal: work and occupation, society, and sex and love. His concept is based on how we deal with these issues throughout our lifespan. Adler maintains age does not offer immunity against the challenges of life. As Lorraine G. Hiatt has suggested in her work, *The Environment as a Participant in Health Care*, buildings and spaces directly influence the quality of life for the older person. Consequently, architects must begin to design buildings and spaces which will enhance old age.
The purpose of this research is to establish guidelines for the development of a supportive environment that is conducive to the needs and desires of the elderly. This type of environment should include a cross-section of older adults, experts, and community leaders. The report will consider the physical and emotional needs of the elderly, the impact of social isolation, and the role of technology in enhancing quality of life. The research will address important ethical, legal, and policy issues.

**Procedure:**

*Example of procedure*

The report will consider the physical and emotional needs of the elderly, the impact of social isolation, and the role of technology in enhancing quality of life. The research will address important ethical, legal, and policy issues.

**Ethical Considerations:**

The report will consider the physical and emotional needs of the elderly, the impact of social isolation, and the role of technology in enhancing quality of life. The research will address important ethical, legal, and policy issues.

**Significance:**

The report will consider the physical and emotional needs of the elderly, the impact of social isolation, and the role of technology in enhancing quality of life. The research will address important ethical, legal, and policy issues.

**Results:**

The report will consider the physical and emotional needs of the elderly, the impact of social isolation, and the role of technology in enhancing quality of life. The research will address important ethical, legal, and policy issues.

**Recommendations:**

The report will consider the physical and emotional needs of the elderly, the impact of social isolation, and the role of technology in enhancing quality of life. The research will address important ethical, legal, and policy issues.

**Conclusion:**

The report will consider the physical and emotional needs of the elderly, the impact of social isolation, and the role of technology in enhancing quality of life. The research will address important ethical, legal, and policy issues.

**References:**

The report will consider the physical and emotional needs of the elderly, the impact of social isolation, and the role of technology in enhancing quality of life. The research will address important ethical, legal, and policy issues.

**Appendix:**

The report will consider the physical and emotional needs of the elderly, the impact of social isolation, and the role of technology in enhancing quality of life. The research will address important ethical, legal, and policy issues.

**Figures and Tables:**

The report will consider the physical and emotional needs of the elderly, the impact of social isolation, and the role of technology in enhancing quality of life. The research will address important ethical, legal, and policy issues.

**Acknowledgments:**

The report will consider the physical and emotional needs of the elderly, the impact of social isolation, and the role of technology in enhancing quality of life. The research will address important ethical, legal, and policy issues.

**Appendices:**

The report will consider the physical and emotional needs of the elderly, the impact of social isolation, and the role of technology in enhancing quality of life. The research will address important ethical, legal, and policy issues.
desire—ambition is to eventually produce architecture that is designed and crafted by the elderly. An analogy is that of the indigenous architecture of Africa. Although it is considered primitive architecture, it is actually a complex architecture that has developed over centuries, molded and crafted through tradition to meet the socio-cultural, physical, and climatic needs of the African people. Through empirical testing and interim response, the elderly will create their own architecture.

The process of empirical testing will include interviews, observational recordings, and visual questionnaires (see appendix). The visual questionnaires will allow the elderly to critique the architectural design through the use of sketches.

The following is a procedural calendar.

Winter Quarter
December 1986: Discussions and interviews with the elderly, administrators, faculty, and gerontological experts
Study of subject literature and surveys
January 1987: Research analysis and initial conclusions
Determination of guidelines for design

Spring Quarter
March 1987: Schematic design and analysis
Integration of research and conceptual notions
May 22, 1987: Final presentation of graphic and textual response

Facilities:

Gillespie Towers Retirement Center
Muncie Indiana
Gwen McWhorter- Administrator
(317) 747-7553

Anderson Health Care Facility
Anderson Indiana
Sandy Sheiler- Administrator
(317) 638-8223

Institute of Gerontiology
Ball State University
Gary Meunier- Director
(317) 285-1293

Fountain View Nursing Home
Muncie Indiana
Pauline Dailey- Administrator
(317) 286-5979

Westminster Village Retirement Home
Betty Devoe- Administrator
Muncie Indiana
(317) 288-2155
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**Research Fund**

Amount Requested from Undergraduate Research Fund: $150

**Other Reimbursement**

Amount Requested: $250

Please itemize all project costs below. Amount Requested not to exceed $200.

**Name:** Michael W. Haskell

**Advisor:** Professor Mendez

**Department:** Architecture

1986-87 Academic Year

Undergraduate Student Research Fund