ELDERLY HOUSING FOR ELDERLY BUILDINGS

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For Claudia's mother, Teresa Trump Merideth Radakovich, 
who would have been a wonderful elderly person.

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The basic premise of the thesis is that locating a congregate housing complex for the elderly within the city proper can be mutually beneficial, both for the elderly congregation which can benefit from its proximity to established neighborhood services and framework, and for the city which can benefit from having a new kind of life brought to buildings and neighborhoods in need of creative revitalization.

First the thesis examines the life patterns of aging people with the intention of discovering certain characteristics which might be used as guidelines in the design process. Contrary to much thinking in the past, the aging population approaches a higher degree of variability and is characterized by a wider, not a narrower, range of specific environmental needs.

As people age they undergo profound physical and social changes which transform their relationship to the environment. Any new environment must provide spatial and social enhancements to stabilize a fading self image. However, it is argued here, housing for the elderly need not be based on stereotyped images of aging with
their accompanying boilerplate design solutions.

Secondly, the thesis examines the potential for old buildings in intracity neighborhoods to become elderly housing settlements. Through the revitalization of old buildings a sense of longevity in the environment can be achieved. The inclusion of a community of elderly persons within those revitalized buildings has the potential of amplifying the full cycles of both human and architectural life.

Thirdly, the thesis proposes a strategic approach to the problem-solving complexities of elderly housing design. A larger strategy seems necessary at this time as the size of the elderly population is growing continually and the duration of this life stage is continually being extended. The strategy is to pursue a series of ideal objectives for congregate housing, utilizing old buildings in intracity neighborhoods, with the inclusion of certain mixed-use activities, as guidelines to achieving innovative design solutions.

After a survey of various built and drawn elderly housing designs, which seem to embody some of the ideal qualities being sought, a design exploration is made for a site in South Central Boston on which there exist two abandoned school buildings.

The basic intention is to discover the potential of a particular site to effect an optimal solution to a particular program, especially in terms of the building diagram and the architectural treatment of its edges.
INTRODUCTION

It is estimated that by the year 2000, 36 million people will be over the age of 65. With the accompanying decrease in family size and the ever-increasing cost of caring for the aged, it seems sufficiently clear that new attitudes must be developed and alternative methods for housing the aged must be pursued. In 1980, those over the age of 75 were 6 times more likely to reside in a nursing home and for longer periods of time than the "younger" elderly population.

Since nursing care for the elderly cost an estimated $12.6 billion in 1979, housing alternatives that can support the continuing independence of elderly persons are earnestly being sought. In the United States, as well as in most European countries, the waiting lists for suitable elderly housing are growing.

Given these statistics, I became interested in the implications for architects in the next two or three decades and beyond. However, my initial discussions with some architects and students of architecture were, to say the least, negative. Many simply did not want to discuss
such a depressing topic and many could not see much potential for the designer in a pretty much cut-and-dried business of "building for the dying".

Fortunately, however, discussions with and writings by gerontological researchers were most encouraging. There are a great many problems to be dealt with but the potential for innovative solutions is equally great. I was particularly attracted to the idea that, contrary to much thinking in the past, the aging population approaches a higher degree of variability, and is characterized by a wider, not a narrower range of specific environmental needs. This idea in itself seemed to offer a great number of design possibilities as it coincided with our architectural precepts which promote the creation of as many differences as possible within a continuous framework.

A particularly strong interest in the avoidance of further isolation for elderly people led me to consider solutions for the most active possible environments, namely, intracity environments and I discovered that considerable research in this area condoned and encouraged such an approach. The fact that much of our new built interventions within the city today involve the adaptive reuse or inclusion of older buildings in design schemes led me to consider these "elderly buildings", the architectural equivalents of aged people, as ideal companions for one
another, with similar difficulties, similar needs, and similar potentials.

It seems that we are frequently too eager to abandon people and things that no longer seem to have any useful purpose. Aged people and aged buildings are both real and symbolic elements of a past age, the preservation of which is vital to our social continuity and stability. The juxtaposition of elderly housing with various mixed use functions in an intracity environment would provide the community at large with the opportunity to observe the life style of a group of independent well-elderly people in a congregate housing situation. Reciprocal benefits could be derived from this communal arrangement, especially when the inclusion of useful work opportunities for the elderly were provided, which involved them on a daily basis with the larger community and neighborhood. The utilization of old buildings or parts of older buildings in the architectural design of such a settlement would add another dimension to the symbolic sense of association with the past and hope for the future.
ELDERLY PEOPLE; 1.
LIFE PATTERNS

The profound physical and social changes which most persons undergo with advancing age transform their relationship to the environment. These transformations often make it necessary for each person to modify his patterns of living and/or his environment in order to maintain the independence and self-confidence which he formerly enjoyed. In designing a new home-environment for the elderly, the architect is required to understand and acknowledge these transformations which come with aging in order to effectively conceive of an environment which is responsive to the limitations of the elderly inhabitants and fosters the potential opportunities.

Many elderly people enter special housing communities because of a need to change both their home environment as well as their pattern of living. The need to leave their current home for another may be due to physical, social or economic changes, or the decision may be based on an individual's decision to prepare for future needs. The need to leave their current home may be the result of a reduction in certain physical or sensory
capacities, a radical change in personal finances, or a change in an elderly person's social role. The move from the current home to another home environment is an acknowledgement of the individual's changing needs. Certain needs and patterns, however, must continue in the new environment if a successful change is to occur. The greatest possible degree of continuity in an individual's sense of independence, choice and integrity must be provided for in the new environment.

**Vitality** The devitalization of a former pattern of living can occur because of social or physical changes. The social role of an elderly person changes radically as the result of retirement, the reduction of familial responsibilities, or the death of a spouse. The physical deterioration of certain faculties may also create a need to change to a home environment which makes better provisions for less stressful confrontations resulting from these physical changes. Change in the social role of an individual may in itself require a change in the home-environment. These changes in social role may create a great deal of leisure time which might be filled with new activities that change the individual's association to his home. This is most often true in the case of retirement. The home environment must then be capable of providing sufficient spatial diversity and social diversity to compensate for the individual's increased inhabita-
tion time. Also, the reduction in familial responsibilities often means a change in the individual's social role as well as a reduction in the physical requirements of the home. With the family gone and the responsibilities of rearing complete, the family-centered social encounters may be moved outside the home diminishing the parent's social role in its organization and altering the physical environment of the social gathering.

Finally, the loss of a spouse, the most radical change in social role, reduces greatly the ability to manage the home environment. The social relationship to the community is also altered, requiring the reconstruction of a suitable social framework.

With the deterioration of certain faculties, mobility or sensory capacities may be diminished. The vitality of the elderly person is jeopardized when his ability to comprehend or negotiate the environment is reduced. The inability to cope with certain environmental barriers or ambiguities can result in stress and anxiety. When balance and stamina are reduced mobility is diminished. The response to these stressing situations encountered in the changed environment frequently is withdrawal. The diminution of sight and hearing can also seriously decapacitate the elderly person, jeopardizing personal security at home.

The need to change home-environments is greatly increased
by these various physical changes. The new environment must then acknowledge these physical and social changes, compensate for them, and provide sensitive solutions which will help reduce physical harm and restore a diminished self-image.

To support the vitality of the elderly in a new environment, sustenance of their diminished physical functions must be sought by means of providing environmental supports for their changed vital functions and biological requirements, as well as their reduced capabilities.

Sense As the physical, social and economic changes begin to affect the aging person's anthropomorphic relationship to his previously familiar home-environment, his sense of those familiar places and social situations also begin to change. His values and concepts regarding the old environment may no longer be in harmony with cultural constructs which once gave them meaning. His sensory and mental capabilities may no longer have significance in the old environment. Physical orientation may become blurred, reducing the legibility of path and place. The environment may no longer be perceived and identified with clarity. And the ease with which elements of the environment are linked with other events and places may no longer create a coherent mental representation of time and space or a coherent connection with non-spatial concepts and values. The join between
the form of the environment and the human processes of perception and cognition become ill-defined. The problem becomes a question of the interaction between the person and place and how the environment is perceived. The person's sense of his environment has changed.

The aging person's sense of identity with a place, its vivid or unique character, may no longer be recognizable as having positive, distinctive qualities. The sense of a place depends on spatial form and quality, but also on the culture, temperament, status, experience and current purpose of the inhabitant. With changing physical capacities and social roles an aging person's identity with the home-environment must change if an appropriate, sensible, and fulfilling life pattern is to be rediscovered. The home-environment must reacquire a significance or a new environment must be found for which a significance can once again be gained. The new place must provide opportunities to re-establish basic values, life processes, new historic events and a fundamental social structure.

Fit As physical, social and economic changes occur, the aging person's home-environment may no longer fit his changing patterns of living. The old environment which supported once customary behavior may no longer be modifiable to support the new behavior, the new demands and the new meanings. The once balanced environ-
ment may no longer match newly required spatial needs or altered functional and social needs. When the behavior of the aging person can no longer be changed or modified to fit the environment, the environment must be modified or changed to fit the behavior.

The degree to which the old environment fits can be determined by examining degrees of comfort, satisfaction and efficiency. These attributes of space have a relative importance to each individual and may change frequently over time with associational differences. The loss of a spouse, for example, can imply "isolation" when the home is no longer a shared environment. Some other environment which would provide opportunities for increased social contact would be desirable. The need for increased bed rest may become psychologically debilitating if the environment is not adaptable to compensate for the need to be in a solitary place for long periods of time. When independence is desired, despite some newly recognized need for new social contacts, the unique qualities required of an appropriate physical setting to support these needs and desires are clearly complex. The resilience of the home-environment to accommodate these new living patterns, to maintain its fit, will determine whether or not another more adjustable or manipulable environment is required.

Access Of course radical social, physical and economic
changes in an aging person's life style may alter his ability to reach other persons, activities, resources, services, information or places. As the powers of locomotion fail the world of the aging person begins to shrink. The home-environment, which was once the center of life may become the greatest liability to gaining access to social and physical resources once a spouse has died, the children are living elsewhere, and/or economic changes have altered the pattern of living.

Human beings are social animals and frequent contact with members of a primary social group is fundamental to their well-being. A physical or social change may put a strain on the previously well-established social networks. If those networks are not resilient to change, if the once primary social group loses its meaning, then extraordinary actions must eventually be taken to re-establish access to comparable groups through revised networks. Electronic communication continues to replace or be substituted for physical proximity, however, the visit with other persons is still vital to a balanced social life.

Access to certain key human activities or important services such as financial, medical, recreational, educational or religious institutions is also important. When sensory capacities are reduced and increased im-
mobility becomes problematic, an environment must be sought which will compensate for these changes by providing access or easier access to services, material resources, places and various information. The restriction or narrowing of access brought about by these changes can drastically reduce the size of the world in which the elderly person lives. This reduction can be compensated for in environments which are located near transportation networks or are designed specially to provide transportation or other channels of easy movement to required or desired services, activities or places.

Control Diminished control over the once-familiar and friendly home-environment can also cause feelings of anxiety or dissatisfaction. As a territorial animal, man has a need to use spaces to manage social interchange and assert his rights over his personal environment. Spatial controls have strong psychological consequences and one's social status is buttressed or at least expressed by spatial dominance. When social, physical, or economic changes occur, the elderly person's lost or changed control over the home-environment may result in less apparent need for individual expressiveness. However, a new home-environment must provide ample opportunities and encouragement for continued individualization and spatial manipulation in order to compensate for those environments which can no longer practically be adapted or modified to suit in-
individual needs and desires.

Changing patterns of living will call into question the aging individual's ability to exert control over his environment, an essential and desirable human need. However, the changing patterns may require the resettlement of the individual in an environment which provides opportunities for individual controls while compensating for new physical and social differences and deficiencies of its elderly inhabitants.
ELDERLY BUILDINGS; LIFE CYCLES

Longevity and Evanescence The concepts of longevity and evanescence seem to be most appropriate ones in the discussion of both the aging of the human body as well as the aging and "re-aging" of built form. As human beings we strive innately for longevity while being constantly reminded through the various life cycles of our evanescence. As architects we design and build with longevity in mind while planning for and even encouraging partial evanescence. In architecture the precise location or character of the evanescence cannot always be anticipated or controlled. Only with hindsight can we say with any confidence that a built form had been successfully conceived to accept a particular future evanescence. The socio-economic forces at work today on any built form of the past could not be fully anticipated at its inception. Given today's socio-economic forces, however, architects are clearly encouraged to seriously evaluate unused or

The longevity of the East Cambridge Savings Bank was assured despite program changes which demanded expansion. An addition was made and the continuity of the facade was maintained by reusing a section of the granite facing from the side of the building.
abandoned existing built form prior to making new interventions.

The longevity of existing built form through rehabilitation, restoration, adaptive re-use, etc., or even the preservation of certain fragmentary reminders or "ruins" can conceivably extend and redefine the actual and perceived value of a place as well as that of its users. The sense of longevity in the environment can contribute to a sense of longevity in man, while the evanescent qualities of a ruin surrounded by lively new interventions can reflect a certain enduring quality for man despite his own evanescence.

Continuity, Stability, Selectivity Our built environment is the clearest proof of our civilization's continuous evolution. Since that which is built frequently outlives the purpose for which it was built, the continuity and stability of civilization is best reflected in the built forms themselves. Continuity and stability make memory possible. Memory is vital to the retention of the meaning of past events. It is a selective pro-

The projected re-use of a utility generating station in San Francisco, originally slated for demolition, will be for a mixed-use commercial, office, and retail space. A distinctive new entrance cut into the previously blank north facade would help direct pedestrian traffic through a central public mall with restaurants and shops on either side. The mall would be a major connector between two large plazas.
cess and not an all-inclusive accumulation over time. Selectivity, therefore, is a most important act when applied to the fate of our built environment.

Old buildings in viable neighborhoods, if deemed to be somehow valuable, can provide an opportunity for a new setting by preserving those images and associations which are useful to both the original inhabitants and the new ones. Through his selection process the architect must preserve the familiar connections in the process of interweaving the useful qualities of the old with the functional demands of the new. The old buildings and the neighborhood in which they exist must be seen as an opportunity for dramatic enhancement, with the buildings and the neighborhood becoming richer than they were.

**Unique Institutions** The selectivity process which the architect employs to achieve a strong character in his solution for interweaving the old with the new, will be most effective when a unique institution or the values and behavior of a unique group of users are fixed guidelines in the interweaving process.

**Previous Patterns** Re-use or redevelopment of old buildings and their environments are also frequently constrained by previous patterns. The influence of these patterns

(At Yale the former divinity school chapel and new additions were used to enclose an interior courtyard and house the School of Organization and Management.)
from the past should also be made clear, marking the history of the environment on itself. Such patterns can be woven into a new design with less difficulty than is ordinarily associated with preservation on an area-wide basis. Since current needs may require more or less demolition or rearrangement, preserving an entire context is frequently impossible or undesirable.

The architect is charged then with the task of saving symbols and fragments of a demolished environment and embedding them in the new context for another generation. At relatively small expense new sources of public enjoyment can be opened up and new experiences of being alive in time can be expanded. Our image of time can be enlivened through creative temporal manipulation of the environment. The juxtaposition of old and new connotes the passage of time. The contrast can be eloquent.

Collage  In using collage as a building attitude, certain past transformations can be retained, old features can be accentuated to be seen, and new features can be located where they create the greatest formal and associative intensification. Collage implies that new layers of intensification can be applied in the future as well.

(pg. 25) The atrium at Case Western Reserve's new student center engages the walls of two different existing buildings as part of its new interior and permits students access to either building which house student lounges, new cafeteria, bookstore and offices.
It is the deliberate juxtaposition of seemingly disparate elements in such a way that the form and meaning of each is amplified while retaining a coherent whole.

**Balanced Life Cycle** The continuity and stability which can be reflected in the built environment, by a retention of select elements in juxtaposition with the new interventions, must be in fact a reflection of some understandable qualities extent in the social structure of the community. The evolution of the community should be guided by the ideal of a balanced life cycle in which people at every stage of life are represented in it. The evolution will be manifested in the various settings required to support each stage of life and encourage interaction between them.

In the case of elderly housing, in particular, there are mutual benefits to be derived from the inclusion within an existing community of a settlement of active well-elderly people. The full cycle of life will be more completely represented and balanced in that community. That balance, then, within a community among the various stages of human life, as well as the representations of those various stages as expressed in the built environment through selective re-use, juxtapositions, and collage, can provide its inhabitants with a setting which presents constant evidence of a desire for longevity while acknowledging fully its own evanescence.
PURSUING AN IDEAL; 3.
THE METHOD

The problem being posed here is to attempt to discover the nature or character of the ideal housing complex for a group of independent elderly within an intracity environment. By examining the needs and lifestyles of elderly people and by surveying certain drawn and built designs which seem to embody commendable traits, a list of objectives is determined for which architectural expressions are ultimately to be found. The basis for the direction of the search is the hypothesis that elderly people and "elderly buildings" (i.e. old buildings, abandoned buildings, unused buildings) in an established neighborhood share certain potentialities, the effective exploitation of which can lead to mutual revitalization and longevity. Included in the search are the characteristics or sense of neighborhood and the symbolic meanings of the external forms of dwellings.

The architect remains the form-maker. In the case of elderly housing design, it is he who must interpret the various demands and desires of residents or their representatives, accept the limitations set by policy-makers, incorporate the state-of-the-art as prescribed
by the social theorists, reconcile the demands of various financial agencies, and ultimately give form to a reasonably acceptable design concept. His ability to comprehend the complexity of these various forces and the method he employs to resolve them will influence his form-making. The form will influence the lives of the elderly inhabitants and the neighborhoods which they occupy.

Finally, the doors will be opened to allow in the critics. If the form and/or its function are in conflict with any recognized principles the architect will be informed. If some architectural innovation has proved viable, the state-of-the-art will have been advanced. Regardless of the outcome, everyone will have learned something; the building cycle and the learning cycle will be virtually complete.

Current literature on the topic of elderly housing is replete with mutually contradictory opinions of theorists and pragmatists. The architect as form-maker is challenged to sift through these opinions in order to make an effective projection for the problem at hand. Rather than cancel one another out these opinions tend to have a cumulative effect and, therefore doubly hinder the architect. One method which can be used to escape this frustrating position, to avoid immobilization by these various critical opinions and to offer people of differ-
ent theoretical approaches an opportunity to construct models not preconditioned by their own dogmas, is to extract "objective ideas" from existing or projected designs. This method should permit the exchange of ideas on new grounds without seriously betraying the ideological commitments of all those concerned with elderly housing.

I am proposing a strategic approach rather than a tactical approach to the problem. The need for strategy becomes even greater as the quickening pace of change
continues to challenge tactical moves. As the pace quickens, the need for a clear view of ultimate objectives becomes greater. This seems to be the situation elderly housing finds itself in today and will face to an even greater extent as we near the twenty-first century.

The aims then of what follows are to permit the affirmation of values that one can hold and respect right away, the setting of objectives that can be achieved one by one, and the choice of permanent scope. These aims should be attainable by suspending for the moment the contradictory opinions of the theorists and the pragmatists and disregarding the regulatory constraints which inhibit quality design. This is an exercise in developing an ideological framework with the intention of rediscovering the concept of the true potential of elderly housing, which avoids falling into any excesses or
under the influence of any one dominant theory or regulatory body.

VALUES Those values which are set forth here for the purpose of constructing an ideal framework for elderly housing in an existing neighborhood, and the values which are sought out in the survey of drawn and built projects, include the potential of these built environments to encourage the effective, satisfactory use of time, space and social network by elderly persons who would inhabit them. The hypothesis put forth and tested by gerontological researchers suggests that the location of elderly housing centrally within the city will provide elderly inhabitants with a more active, autonomous and satisfying use of time, space and the social network. Central locations have been shown to provide a richer supply of other persons and of peers from among whom to select friends and acquaintances, a higher concentration of services and facilities, a greater utility of walking, as well as the better service of public transit.

Those values set forth here regarding the re-use of elderly buildings in an intracity environment include the maintenance of spiritual roots and connections to the past by means of sustaining built environments which embody people's relation to the land and the past, exist as objective community realities, and have become a real part of the communal consciousness.
OBJECTIVES The general objectives for the ideal framework of elderly housing established here as part of the hypothesis include: the enhancement of the image residents have of themselves in the community by promoting environmental interventions which encourage order and diversity, simplicity and richness, variety and clarity, and communality and individuality. These objectives
are seen as achievable in the creation of elderly housing environments by virtue of the fact that they tend to support the stated values of effective and satisfactory use by elderly persons of time, space and the social network.

The objectives, based on the utilization of elderly buildings for use as elderly housing with a variety of adjoining mixed uses, include their intensification in such a way that their public meaning and their continued public accessibility and use compliment and enrich the private meaning, accessibility and use for the elderly living in them, as well as the neighborhood which embodies them.

In particular, the objectives include: Vitality; The form of the newly designed settlement must support the vital functions and capabilities of the elderly inhabitants as well as those of the people who currently occupy the neighborhood. With regard to the elderly in-
habitants of the newly designed settlement, vitality is achieved and maintained by providing opportunities of new interpersonal relationships, ideally replacing the family structures which have diminished because of the death of a spouse and/or the departure of now-grown children. The inclusion of other uses in an overall scheme will provide opportunities for elderly inhabitants to do useful work and pursue hobbies, etc., as well as encourage cross-use by the inhabitants of neighboring districts. The personal security of elderly inhabitants can be enhanced through the encouragement of total community involvement in the
settlement. More particularly, the vitality of the elderly can be maintained by assuring the clarity of access and space, the diminishing of ambiguities, and the simplification of direction changes to counter the reduction of stamina, balance, and mobility. **Sense:** The settlement design must utilize ordering principles which provide clarity, simplicity, and legibility to achieve an understandable environment. The organization of the environment must communicate clearly what is public, private, and in-between. The intention here is to be clear and simple but not mindless and dull. The social role of the elderly inhabitants must be bolstered again through the employment of ordering systems which distinguish community uses from private uses, provide spatial lucidity, and provide a diversity of potential settings for homelike space within a community environment. **Fit:** The newly designed settlement must provide a match between action and form in its behavior settings and behavior circuits. The design of the settlement must preserve independence and choice for its elderly inhabitants, who share similar social and physical needs. It must encourage the engagement in patterns of living which include both freedom and interaction and provide settings for homelike activity. The spatial and temporal patterns of the new environment must achieve a match with the projected behavior of its inhabitants and other users. It must recognize the needs of the community environment without
sacrificing individual rights. The intention, in the case of the elderly inhabitants of the settlement, is that it provides commensurate amenities which the elderly person is frequently forced to forego because economic reasons require them to move to a place of diminished size and amenities. This can be accomplished by providing spatial and social enhancements through the inclusion of a wide range of spaces. The varied backgrounds and former living patterns of its inhabitants demand that a more elaborate system of settings and movement systems be designed. A match between the customary behavior of its inhabitants and its spatial and temporal patterns must be sought in the design of the settlement, a match between action and form in the behavior settings and behavior circuits. Access: The form of the settlement must make it possible for elderly inhabitants to reach other persons, activities, resources, services, information and places. Accessibility must include also the quality and diversity of those elements which can be reached. Patterns of accessibility must be designed which provide the maximum number of spaces of interaction between privately and publicly-conceived parts of the built-environment. These spaces of interaction should offer neighborly opportunities and not compulsory interaction. The freedom to choose within the environment is vital to the support of independence and self-esteem. Clearly defined public and private spatial definitions with fre-
quent in-between opportunities should assure an environment rich with potential experiences and a social life which is readily-accessible. **Control:** The newly designed housing settlement must acknowledge the rights and needs of its inhabitants to control territories and activities, their use and access, their creation, repair, modification, and management. Spatial controls have strong psychological consequences for elderly inhabitants, including feelings of satisfaction and pride. The social status of inhabitants as well as that of neighborhood users can be buttressed by spatial dominance. In particular, elderly persons should be given opportunities within their environment to express their individuality and to achieve diversity through the manipulation of space. The design of the environment must allow for variations which will encourage place personalization. Also, the changing personalization. Also, the changing physical capacities of elderly persons will dictate different home environments, that is, adaptation over time. The design of the new elderly settlement must assure that individuality is not excluded from the design concept despite the innately greater degree of institutionalization. **Scope:** The scope of our search here for the ideally structured elderly housing settlement is necessarily limited. It is being assumed that the adaptive re-use of so-called elderly buildings within an established intracity neighborhood is viable and practical. Most older people presently live in
metropolitan environments. In 1970 nearly three-quarters (14.6 million) of the 20.1 million persons aged 65 and older in this country lived in urban areas. It seems likely that the tendency for elderly to concentrate their homes in cities will continue. Recognized research studies recommend that in looking to the future it is realistic to consider the urban environment as the common milieu for the later years of life. It is also recognized that American cities presently are harmful settings for the elderly as well as for other groups within the population. Nevertheless, cities may have excellent potential for meeting the needs of elderly people and supporting life-styles appropriate to later years of life. The congregation of elderly persons, as well as those of other ages within cities, suggests that the urban situation contains favorable milieus and compelling attractions despite their obvious failings.

The value and potential value of old buildings is well recognized today. Old buildings are frequently adapted to uses for which they were not originally designed, and even the fragments of an obsolete environment are carefully restored or converted. The design portion of the thesis examines explicitly two old buildings in an established Boston neighborhood to expose their value as housing for elderly persons. The scope of this thesis is further narrowed to include an exploration and an evalu-
ation of the potential of a particular site to accept an elderly housing scheme in tandem with a variety of additional uses. My intention here is to examine the innate value of a district to a newly-included elderly housing settlement, the potential for various additional uses within that new settlement to contribute to the sense of neighborhood, and the value of various architectural schemes to contribute to the sense of home for the newly introduced elderly inhabitants. It is not my intention here to explore interior design concepts, as considerable work has already been done in this area.

With the above expressed values, objectives, and scope, I want to pursue a possibly illusive "ideal" for elderly housing with the intention of discovering solutions which might not be reached when working with the too narrow guidelines of various controlling agencies. The relative value of such guidelines is fully understood. However, they must be temporarily suspended for the purposes of this thesis.
The intention of this chapter is to identify certain qualities within the designs of existing and projected housing complexes of different types, and certain architectural expressions of those objectives mentioned in the previous chapter, namely, vitality, sense, fit, access and control. The following five examples were selected for this survey because some element or characteristic of their design reflects a potential for the effective and satisfactory use of time, space and social network by elderly persons. That element or characteristic is then analyzed here to visually strengthen the intent of a particular related objective for its application in the design process.

Vitality Charwood House in London is a complex which includes an elderly peoples' hostel and small flats within a typical London neighborhood (pg. 42). The physical integration of the elderly within this established neighborhood is the most important step toward their social integration. In this case the elder-
Site Plan
1 Elderly Home
2 Church
3 Clinic
4 Shops
5 Pub
6 Housing Block
7 Library

Section
1 Elderly Home Ground Floor
2 Courtyard
3 Elderly Home Upper Floor
4 Normal Apartments
5 Open Circulation
6 Terrace and Walkway
ly inhabitants are clearly made a part of the neighborhood by being able to share the same streets, shops, and common land with the other inhabitants. The social interaction which is encouraged by the proximity of the elderly housing units in this scheme to church, pub, clinic, shops, etc. is not obligatory. A clear choice, depending on the inhabitants' need or desire for independence, is still possible. The more able-bodied and independent elderly are able to take full benefit of the communality of the neighborhood including the intimate association with people of all ages. Those who need or desire social interaction only with their own age group or some special care group are still included in the whole and are not isolated. The symbiosis between young and old is preserved and the mutual support of both is available.

**Sense** This project by Unwin and Parker of 1898 for a co-operative village is an example of ordering principles which provide clarity, simplicity, and legibility to achieve an understandable environment (pg. 44). The village has its cottages in terraces around a village green. The terraces are an extremely intricate knitting together of individual cottages, mostly L-shaped, which make up incrementally a fascinating series of special places and spaces, providing a diversity amidst the unity, in this case for the working class community of 1900.
The fundamental moral principles at work here, about the ability of individuals to achieve their own distinctive family life and yet work co-operatively together, are in sharp contrast with French Beaux Arts or American City Beautiful approaches which overlaid rigid principles of design on an emptiness of human relationships.

Although this project was not designed specifically for the elderly, its principles or ordering would bolster the social role of any elderly inhabitants by distinguishing community use from private uses and encouraging a co-operation in caring for the elderly within a community environment without need of their displacement.

**Fit De Drie Hoven Old People's Center in Amsterdam by Herman Herzberger** defies the conventional approach to designing for the elderly and creates a most unique and exciting environment for the aged (pg. 45). The Dutch think of their homes as extensions of the street. They not only want to observe the activity outside but they also want to share their domain with their neighbors. This street-home relationship has been perpetuated in this design by treating the corridors along the living units as a street. There are numerous alcoves that serve as informal sitting areas where contact with neighbors can be made, even on short walks. These small seating areas have been decorated by the tenants with plants and furniture and personal belongings giving each street its own
sense of neighborhood. The character of the village street is further enhanced by allowing dogs, cats and birds into the complex.

The central building in the design is considered to be the nerve center of the entire complex and is referred to by the inhabitants as "the village green" (pg. 34 and pg. 46). This spacious meeting place is a kind of multi-use community living room. Since many residents are not well enough to go to town, activities are brought to the residents. The "village green" is the scene of constant activities and gatherings, not only among staff and res-
idents but also between them and the outside community. It works like a small civic center.

De Drie Hoven is an excellent example of an environment which has achieved "fit". It meets the needs of the elderly inhabitants by providing spatial and social enhancements through the inclusion of a wide range of spaces. The varied backgrounds and former living patterns of the residents are also provided for in this way. Most importantly, a match between the customary behavior patterns of its inhabitants and its spatial and temporal patterns are achieved.

Access The Obertor Zentrum in Winterthur, Switzerland is an excellent example of creative adaptive re-use as well as the stated objective of accessibility. Within the walls of the old city and behind the facades of ten of its buildings is an elderly housing complex for about one hundred people (pg. 48). It is also a vital community center, for it includes classrooms, photography lab, reading room, projection room and a kitchen for cooking classes—all of which are open to the public. In addition, there is a restaurant, along with commercial space and offices on the lower levels. The scheme is an excellent example of the benefits of integrating the elderly with the community and providing them continued access to normal intracity living. It also points up how the quality of life can be improved by revitalizing
an urban center and restoring the existing fabric of the city.

Control  The Alten- und Pflegeheim in Reutlingen, Germany by architect Guenter Behnisch (pg. 50-51) is a smaller-scale housing project for older people which acknowledges the need for the elderly person to be given opportunities within his environment to express his individuality through the manipulation of the spaces which make up his new home. This project is virtually devoid of any institutional character. Its exterior is sheathed completely in cedar shingles giving it a warm and inviting appearance. Its residential qualities have been retained even in the details which are scaled to permit easy manipulation of windows and doors and the personalization of rooms and semi-private terraces off each unit. Individuality is not excluded from the design concept despite the necessarily greater degree of its institutional function.
AN ELDERLY SITE; 5.
A DESIGN EXPLORATION

The site selected for the design study is located in Boston's near South End, at the intersection of Dartmouth Street and Appleton Street, about four blocks south of Copley Square.

The approximately 1½ acre site is located among the earliest of Boston's row houses. The site is occupied by two red brick buildings, both abandoned schools, which are currently undergoing renovation and adaptation for condominium use. The buildings, built in 1868, are dramatic examples of Victorian architecture of the French Academic Style. The larger of the two buildings was the four storey Rice School with approximately 40,000 square feet of usable space. The smaller building was formerly the George Bancroft Public School with about 15,000 square feet of usable space.

Both buildings have entries on the street level, however, the yard which they share is approximately five to six feet below the street. The buildings are surrounded by a neighborhood of four storey row houses, many of which are condominiums or being developed for that use.
The site is within minutes of Boston's finest cultural offerings, including the Museum of Fine Arts, the Isabella Stewart Gardner Museum, the Boston Symphony Orchestra, the Boston Shakespeare Company, the Boston Ballet, the Boston Center for the Arts, and the Institute for Contemporary Art.

Two blocks from the site is the new Copley Place development, with its array of shops and restaurants, and the new Back Bay Station, a new transportation complex combining convenient intercity, commuter rail and mass transit services. Four blocks from the site is Copley Square and Trinity Church. Within five blocks is the historic Back Bay with the banks of the Charles River just beyond.
1 Proposed Elderly Housing Site
2 Existing Public Transit Line
3 Intercity/Commuter Rail Station
4 Shopping/Restaurant/Hotel Complex
5 Art Gallery/Shopping
6 Shops
7 To Parks/Churches/Shopping
The capacity for the Dartmouth Street site to be utilized for elderly housing and a neighborhood center, with additional uses for shops and offices, is reflected in a series of schematic sketches (pg. 61). The alternative possibilities range from minimal transformations of the existing buildings with some minimal additional buildings to very extensive transformations including, most importantly, the creation of a major access through the site from Dartmouth Street, a condition which has apparently never been promoted, as evidenced by the non-penetrable facade of the Rice School Building on Dartmouth Street.

The solution selected for a more detailed, although spontaneous, sketch (pg. 62) reflects the following intentions:

1. The need to promote the Dartmouth Street facade as entry to a larger communal building by means of a sun-lit atrium space

2. The infilling of the depressed courtyard on the Appleton Street side to further promote the continuity of the public access into this most public space

3. The retention of the strongest architectural features of the existing buildings (namely, the corners and towers) to promote the concept of more personalized homes, with additional towers built as infill, together intended to reflect the incremental nature of the row house context

4. The further dissolution of the Bancroft School courtyard facade to promote access to shops and offices

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