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The intermediate zone between the public and private

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Rice University, 1992
RICE UNIVERSITY

THE INTERMEDIATE ZONE BETWEEN THE PUBLIC AND PRIVATE

by

MEENA SONEA HEWETT

A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE MASTER OF ARCHITECTURE

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ABSTRACT

The Intermediate Zone Between the Public and Private

by

Meena Sonea Hewett

Within the cyclical nature of our lives, the partitions between individuals and public are inveterate. The wall creates zones between the individual, family, and the city. Its design affects the degree of interaction between these groups. Loss of intermediate zones in the planning of the "modern city" had implications for the social, and the architectural context. By re-introducing these spaces into a contemporary context, there are possibilities for renewed forms of interaction between the individual, family, and the city.
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<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>TABLE OF CONTENTS</td>
<td></td>
</tr>
<tr>
<td>ABSTRACT</td>
<td>ii</td>
</tr>
<tr>
<td>ACKNOWLEDGEMENTS</td>
<td>iii</td>
</tr>
<tr>
<td>LIST OF ILLUSTRATIONS</td>
<td>v</td>
</tr>
<tr>
<td>PREFACE</td>
<td>vi</td>
</tr>
<tr>
<td>Physical element</td>
<td>7</td>
</tr>
<tr>
<td>Segmentation of Time</td>
<td>8</td>
</tr>
<tr>
<td>The Metaphysical Wall</td>
<td>10</td>
</tr>
<tr>
<td>WALLS IN THE SOCIAL CONTEXT</td>
<td>11</td>
</tr>
<tr>
<td>Individual and his mask</td>
<td>11</td>
</tr>
<tr>
<td>Individual and the Family</td>
<td>12</td>
</tr>
<tr>
<td>Family and the Larger Public</td>
<td>13</td>
</tr>
<tr>
<td>WALLS IN THE ARCHITECTURAL CONTEXT</td>
<td>16</td>
</tr>
<tr>
<td>Walls between the Family and the City</td>
<td>16</td>
</tr>
<tr>
<td>Walls between Houses</td>
<td>19</td>
</tr>
<tr>
<td>House and the Individual</td>
<td>21</td>
</tr>
<tr>
<td>BIBLIOGRAPHY</td>
<td>27</td>
</tr>
<tr>
<td>APPENDIX-A</td>
<td>30</td>
</tr>
<tr>
<td>APPENDIX-B</td>
<td>35</td>
</tr>
<tr>
<td>APPENDIX-C</td>
<td>38</td>
</tr>
<tr>
<td>JURY COMMENTS</td>
<td>58</td>
</tr>
</tbody>
</table>
LIST OF ILLUSTRATIONS

1. Delhi. Couple in Chawri Bazaar 3
2. Delhi. Courtyard 4
3. Correa. Tara Housing 5
4. Hejduk. Bye House 8
5. Old Delhi. Map 16
6. Delhi. Map 17
7. Lars Larup. Insertion of Architecture 23
8. A Set of Traps 24
9. Liberated Hand-rail 25
10. Analysis of Courtyard House 39
11. Wall of Bye House 40
12. No-Family House 41
13. Traps in No-Family House 42
14. Site Model 43
15. Site Study Models 44
16. Building Study Model 45
17. Building Study Model 46
18. Building Study Model 47
19. Site Plan 48
20. First, Second, and Roof Plan 49
21. Section 50
22. Section 51
23. Section, and Elevation 52
24. Axonometric 53
25. Building Model 54
26. Building Model 55
27. Building Model 56
28. Building Model 57
PREFACE

The interest of this thesis lies in the physical and metaphysical meaning of walls in architecture. This is done by an exploration of the use of walls in three context: the abstract, the social, and the architectural. An attempt is also made to show the loss of the intermediate zone in our modern cities, when compared to the traditional model. This is explored in the design of a house for three generations of a family. The dwelling is a town house located on the edge of a residential neighborhood and a commercial zone.

With the difficulties of owning a house on large acres of land in the suburbs, the town house gives its residents the opportunity to own a house in the city. This house has a potential for covered parking, front and backyards and proximity to the business district. The design of the town house involves party walls separating two families with a common exterior facade to the city.

Some of the issues present in the design of the town house relate to my interest in the front wall used to establish an intermediate zone which will link the house to the city and the family to the community. Generally the town house also involves a zone of separation between two families. This can be manifested by a single party-wall or by an intermediate space. The design of this intermediate space will affect the degree of interaction between the families sharing the space.
TWO IMAGES

I notice a couple in the middle of a crowded market in Old Delhi. The man appears shy yet looks at me with stained yellow eyes. He acknowledges a greeting for both his wife and himself. His wife is in a veil. She is covered from head to foot in a flowing gown. There are two openings at the eyes through which she sees. The opening is not too big nor revealing. It has a transparent cloth to cover the exposure of the eyes to the public. Her face is turned, denying any familiarity. This suggests her ability to hide her inner emotions from the public yet be a part of the social life.

The houses in this City are primarily of a courtyard style. As I enter from the narrow streets onto the courtyard I pass a blank wall ten feet high. This is the first sign of separation between the private and public property. The entrance door is made of pieces of wood held together by iron ties. The wood is unfinished and unpolished. There are no veneers. It is what you see. A strong iron chain acts as a latch for security. It also serves to announce visitors entering the courtyard, by the sound of the chain pealing against the door. Inside the plain walls of the courtyard is the communal space for the family. Once in this semi-public courtyard, I sense a further line of privacy in the arcade that surrounds the court. The arcade becomes the next layer of separation between the public and the family. Different generations of the family are seen all at once in the court. A family celebration is taking place in this arena. The dinner is preceded by an animated dance performance for all guests. Only the male members of the household are seated in the open courtyard. The women sit beyond the
curtains in a room on the upper level of the house that looks onto the
courtyard. This curtain is another layer of separation between the public
and the private space of the women. The women have their faces covered
by a thin veil.
A Couple in Chawri Bazaar
Courtyard of an Indian house in Delhi being used for nautch (a performance of music and dancing) during the 1860s. The audience is entirely male, although the hooded figures watching from the balcony may be women of the household.
Tara housing by Charles Correa, 1975-78.
Moving through the housing complex located in New Delhi, I notice four stories of housing units stacked one on top of the other. Architect, Charles Correa tries to articulate individual units by offsetting the masses of each floor, in different planes. The high blank walls surrounding a courtyard in Old Delhi is substituted for small balconies at each level, in the complex. The modern City when compared to the traditional City, seem to have reinforced the isolation of the individual from the larger public. The raucous, the sounds of heavy traffic, and the constant reminder of life present in the Old City is muted by the lack of chocker block areas in New Delhi.

The different spaces experienced between the individual and the public in Delhi, can be compared to some urban spaces in the American city. In both places there are boundaries separating an individual from the public. These boundaries are defined by the exterior walls of the house. Inside this the individual has a private existence. When he is out in public, he puts on a defensive mask to separate himself from the public. By describing the presence of walls in a social and architectural context, I hope to iterate the need of an intermediate zone for bridging the gap that separates the very private and the public lives of the individuals.
READINGS OF THE WALL

Physical element
In physical terms the wall is understood as a vertical mass that may separate identical or opposite spaces. In this context the separating piece is in the intermediate zone and is understood as a mass. This zone takes on different readings depending on the materials, its permeability, height, length, etc. Heavy stones stacked on top of each other may symbolize solidity, hardness and obscurity when compared to the transparency of a trellis.

Physical walls are also used to define boundaries. It can be understood as an enclosing mass inside which is order, structure and a sense of completeness and outside it is disorder, chaos, and indeterminacy.
Segmentation of Time

Bye House
The wall has greater meaning than that of a space divider or bulwark. The wall iterates the element of time. John Hejduk, in his design for the Bye House uses the strength of a geometric cube to initiate the readings of the wall. By materializing the diagonal of the square into a three-dimensional object, he creates a wall. On either sides of this wall rests various primary and secondary functions of the house. On one side is the study, the circulation, and the bathrooms. On the other side of the wall is the living, dining and the bedroom. Hejduk sees the role of the wall as marking time. The passage through the wall symbolizes the present. It is fleeting and short-lived and this is expressed by the thickness of the wall. To Hejduk, a person is always moving from a zone of past into the area of future with a moments passage through the present. In this motion of life, the wall denotes the transition through time.

However, the wall as the present is more than a passage through time. In moving through time the present is constantly linking us to our past and future. In this sense it is no longer short-lived, but is ageless. The intermediate links need to be constantly responding to the contemporary times. Without addressing the present, the future cannot be formed. To me, the wall needs to create spaces that can be occupied, to define those moments.
The Metaphysical Wall

A wall exists in our lives. We constantly feel restrained by our emotions. Our minds generate different masks that either reveal or conceal our inner selves. It is one of the more difficult barriers to overcome. It is not a physical wall that can be penetrated. It is delicate and needs to be understood to be entered. This wall becomes multi-faceted over the course of our lives due to our memory. Memory which is rooted in our mind effects the degree of perforations in our emotional mask to convey our inner feelings. For example memory of a friend will allow for a more open interaction. On the other hand to meet a stranger for the first time will put us on guard in our interaction with the person.
WALLS IN THE SOCIAL CONTEXT

Individual and his mask
Desmond Morris, in his book, Man Watching studies humans by analyzing their gestures, facial expressions and body movements. To him, interaction is a cross-cultural phenomena and basic communication between individuals is universal. The facades of individuals are a reflection of their minds. Through his exterior facade a human being expresses his mind to people outside himself. Simultaneously the outside world is perceived in a myriad ways by the individual.

"I dream, for example, I have not yet gained consciousness of how many different faces there are. There are quantities of people, but there are even more faces, for each person has several."
- RM Rilke, Die Aufzeichnungen des Malte Laurids Brigge

In a continuous form of communication, between the individual and others, and between himself, his exterior appearance becomes his informant. It is also his protection. The perforations in the mask allow for different limits of communication. With this ongoing communication in the individual's life, a collection of memories survives in his mind. This is the seat for developing emotional walls. Memories of the past intercede with the present experiences and influence the individual behavior in the future.

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Individual and the Family

From the desert man has come;  
A new desert is his home.²

The structure of families has remained relatively unchanged since the agricultural age. The family has always been the site of individual development. In the industrial era, large family structure dissolved into smaller families and families into independent members. Family members began migrating from the rural areas to fulfill jobs created in the city.

The role of persons outside the family became increasingly important. The lack of interaction amongst family members due to geographical or temporal separation were being fulfilled by neighbors, friends, and relatives. Within the uncertainty of relationships the individual began to feel isolated from others. John Locke observed that the individual considers himself prior to his society. The individual tries to satisfy his interest before he thinks of the society. Only by his own contentment will he contribute to that of the others. The society "comes to existence only through the voluntary contract of individuals trying to maximize their own self-interest."³

With the advancement of the information age, throughout the world, the individual has the ability to come in closer touch with his environment. He is exposed to social, cultural, religious, and political issues well outside his

own life. The individual is soon aware of the diversity outside himself. The context of one's life is being constantly challenged by the complexity of the larger culture. Kafka portrays the individual of contemporary times, as one who is trying to "metamorphose" his form into a beetle, to exist on a wall, removed from all outside human contact. Under such strains of existence, the future of the individual and his relationship to his family and society are constantly altered.

The extended family structure is often seen in India. The structure varies from families consisting of married couples to four generation households. Feelings of sharing and accommodation, privacy and individuality, hostility and companionship are all prevalent in the multi-generational family structure. However, the dynamics between many members of the extended family may differ from the few present in the nuclear family.

In society, the attitudes of individuals that have developed at home, come to play in the expanse of the city. His social education stems from his house. The role of an extended family in the individual's life becomes a linkage between the home and the city. Families which include the elderly and the adult children within their household often reflect the complex social relationships present in the city.

Family and the Larger Public
Families in some cities reflect a part of the larger society. In this context, the norms of the society are indirectly enforced in the family structure. However, Richard Sennett in his book, *The Fall of the Public Man*, observes the loss in the public domain. In eighteenth century bourgeois society "public" life existed outside the life of the family and friends. This was cultivated by building urban parks, pedestrian streets, etc. However, the industrial era saw a shift in the public life of the city. Due to the organization of space in the contemporary cities, the "public life" began to seem meaningless. Sennett also observes that "spaces are created as public spaces but have led to the isolation of Individuals."4 Especially with the growth in area of cities, the public spaces can be conveniently reached only by the automobile. Being in the confines of the car, the space binds the individual and isolates him from the public. On one hand the individual is considered a social being but in many ways he is being led to pursue a private life. When the individual is in public his mask of manners gets in the way of open social contact. Being in private has become an end in itself. The family seems to have become a refuge for the individual. The public domain is considered inferior and the sense of stability appears only within the family.5

Whether we are actually seen as individuals or as social being it does not preclude the demand for housing that will accommodate the changing needs

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5 ibid.
of our future. The design of a shelter and the permeability of its protective wall becomes the architect's challenge.
WALLS IN THE ARCHITECTURAL CONTEXT

Walls between the Family and the City
In the city of Old Delhi, a wall rings around the City and defines the territory. Within the wall of the city were series of secondary walls that defined different public and private spaces. The attraction to the "Walled City" lies in a spatial structure which responds to the social and economic status of the dwellers. Large families pursuing similar occupations lived along side each other, around a common courtyard. Within the walls of the house there were separate areas for men and women. The street front was often a high blank wall in keeping with the custom of purdah (veil) required by the women. The City appeared to be a series of markets with the wholesale and retail shops lining the primary and secondary streets. The houses in the city were densely packed, at times sharing common walls. The narrow streets and the dark voids of the building fabric opened onto bright courtyards of the houses, where interactions between the family and the public were strengthened.

Delhi. Twenty-five per cent of the city is devoted to courtyards.

BIBLIOGRAPHY


Mumford, Lewis. *The Culture of Cities*. Harvest/Harcourt Brace


Lars Larup. A Liberated Hand-rail.
Memory allows for two conditions. The individual as text informing the house and the house as a text informing its occupants. Individuals who bring their past and present experiences to their house, influence the nature of their living. The house begins to reflect their lives. At the same time the memory of the individual's past house informs his living habits in the new house. Here the previous house is seen as the text which informs the spaces in the new house.

Within the boundaries of the house exist the enclave of the resident. It is private. It communicates the idea of separation from the neighbors. The punctures in the wall seem just enough to abide by a residential vocabulary. In the climate of complexities and linkages in the relationships between family, house, and city, the family dwellings need to be reevaluated.

In my mind, the presence of wall and intermediate spaces between the public and private play an important role in our lives. It either promotes or restricts the degrees of social contact. I believe individuals will continue to isolate themselves from others until an intermediate zone is formulated between the public and the private selves. This zone can be created by manipulating the degrees of translucency in a physical barrier which will allow for a stronger sense of security which may lead to greater social interaction.
Lars.Larup. A Set of Traps.
House and the Individual

A house may be understood physically in terms of its plan, which can be read as a description of the spaces it defines. The living room, bedrooms, kitchen, bathrooms, etc. In considering a design for a house, Lars Larup sees the traditional single-family house as self-contained and isolated. There are no mysteries to the house. Its spaces were obvious when seen from the outside. These spaces when put together formed the house. The plan can also be easily understood by the inhabitants of the house. To overcome the banality of the single-family house, Larup, in his book "Planned Assaults", proposes a No-family house. This house is located in a suburban grid. Larup introduces a form between two houses, which in turn transforms the banal reading of the suburban grid. He introduces a "yellow lump" which is analogous to "architecture". This architecture is introduced between two houses, one of which is in a decrepit condition, ready to be stripped of its skin to expose the structure underneath. Larup recognizes the function of memory which does not allow for the decrepit house to be completely erased from the site. A second house is created adjacent to the stripped house. The repetition of the houses begins to reflect the suburban pattern. Between the two houses Larup introduces his "architecture". He sees it as an assault on the suburban grid. Yet the existence of the ordinary housing forms affect the "architecture". By introducing the element of "architecture" into the house, a mystery is also created in the interior spaces. The single-family house is no longer consistent in its reading from the outside or inside. This introduction of architecture into the house is the architect's "assault" on the straight
forward reading of the single-family house. To him the occupants of the
No-family house would now respond in a different manner to the spaces
created within the house. In transforming the building from the generic
house to a house with an architecture it is injected with meaning that
informs the attitude of the inhabitants. Larup sets out traps like "stairs that
lead nowhere, liberated hand-rail," etc., within the interior of the house for
the inhabitants. "Since the daily narratives are so all-consuming, and the
dweller rarely pauses, traps must be inserted to expose the margins of the
houses." Through his architecture the house form becomes a text that
informs the inhabitants.
protective wall confines the family. The continuous form of the traditional building fabric is replaced by individual houses as objects in the city. The need to define exterior city boundaries is replaced by individual property limits. With land becoming scarce, each individual desires to protect his own piece of land. Walls are built around smaller plots of land. The quality of streets and courtyards congenial to social gatherings is altogether eliminated. Yet the nature of time proves to be cyclical and the wall remains in our lives.

Walls between Houses
Divisions between houses in a city can be created by a physical space or by the shared exterior walls of the house. The use of walls can be seen as the symbolic representation as well as the physical representation of separation of the houses. The family who occupy the house in the city are differentiated by the exterior facade of their house. Any links between the house and the city depends on the permeability of the exterior facade. Sometimes it expresses the characteristics of the family inhabiting the space. At other times it hides them. At times the wall reflects both, the culture of the family and simultaneously relates to the environment of the city. Adolf Loos observed one extreme view. "It is seen as the split between what we think and what we do, between our social and intimate being." He writes: "The house does not have to tell anything to the
exterior; instead all its richness must be manifest in the interior.  

Unlike the public buildings that needs to attract outsiders to it, Loos believes a house for the family must be silent on the outside. The interior space of the Muller House allows for the dynamics that might occur in the public realm. The interiors of this house has multiple spaces. From the small intimate room to the communal areas. The intimate room is analogous to a theatre-box from which the individual observes the activities in the communal space. The windows on the exterior walls are strategically planned to allow light from the outside to cast different readings of the individual who inhabits these spaces. With the diversities of spaces in the house, the public realm has entered the private house which sets the boundary for action. Beatriz Colomina observes in the different analysis of Loos' houses, that he cannot getaway from the significance of the wall which separates the interior from the exterior. "In every Loos house there is a point of maximum tension, and it always coincides with a threshold or boundary." For example, in the Moller House, before the individual enters the house, he occupies an alcove which is not a part of the interior, and yet is raised from the street level. The threshold of Loos' house becomes the intermediate space which links the exterior of the house to the interior.

8 Colomina, Beatriz. _Architectural Association: 20_. Intimacy and Spectacle: The Interiors of Adolf Loos; 13
When the British occupied India, they forged the Imperial Capital in Delhi. Edwin Lutyens and Herbert Baker were the leading architects of the New Delhi Planning Committee. The planning was based on "a system of axes and diagonals drawn from the tradition of Baroque Classicism ..... establishing visual hierarchy."\textsuperscript{6} The elements of this plan had been earlier used in Rome, Versailles, and Washington D.C. Even though New Delhi was built adjacent to Old Delhi, the possibility of harmonizing the two urban cities was never fully considered. New Delhi became a city of open spaces, grand boulevards, and streets designed to the scale of the automobile. The numerous retail shops scattered across the city of Old Delhi was displaced to the Central Commercial Complex, accessible by car. 

The planning of the New City did not respond to the social and economic tradition of the Indian population. In contrast to the plan of the Government Complex, the residential areas of the City appeared to be in a state of disarray. The New City lost the myriad layers of separation between the public and private lives of the inhabitants. Living in the city was divided into a very private life on one hand and a very formal social life on the other.

The walls of the traditional cities are in some way similar to the walls of our present cities. In both cases the wall separates the private and the public domain. Now however, the walls have bounded the lives of the people. Instead of defining the outer boundaries of the community, the

APPENDIX-A

It is commonly accepted in the United States, for elderly people to live in nursing homes or in housing facilities provided for old people. The elderly people are mostly over the age of sixty-five years. Most of them have retired from their work environment. At this time, they may be either physically healthy, or disabled. It is essential to them to be in touch with the environment in which they have spent a large part of their life. The nursing homes, in general, have an environment the elderly are not used to. They did not grow up here. Before moving into an elderly housing complex, they did not spend their lives living in the midst of strangers. Now they are in a place with other old people. I am curious why an elderly person would chose to live in this environment. If this same individual was given an alternative to live with his family or in his own house where he spent his early life, would he still chose to live in an estranged environment of a nursing home?

The advantages of living in an elderly housing are closely linked to the facilities provided in them. There are many old people under this same roof. There is no discomfort of communication between different generations. The elderly may not be conscious of looking wizened among their fellow residents. There is no urgency to move at high speed from one place to another. Life is a jolly amble through the hallways of the complex. It is easy to find people to converse with since everyone present is a retiree from work. There is no rush through the day.
The drawbacks of this life-style is the uprooting of old people from a place they have spent a good part of their life. They are amongst other old people who are initially strangers from different backgrounds. The inertia which comes with old age may rub onto other old people, who under different circumstances, might have more energy than people in their mid-twenties and thirties. A recent public television program suggested that "experts estimate that as many as one-third of the people now in nursing homes would not need to be there if alternative means of providing for the frail elderly at home were available."(Hare 15-16)

It is possible that alternatives to living outside the nursing homes and elderly housing are not attractive to the elderly people. Lack of suitable housing conditions for the aged, encourage them to find support in government institutions like Medicare and Medicaid. These institutions are however, in sterile conditions away from the quality of residential neighborhoods. With the Federal subsidy for the elderly depleting slowly, alternates to nursing homes will eventually be pursued. Some surveys have shown that a large number of elderly people do not want to move. They prefer to "age in place." Either in their own home or in their neighborhood (Peirce p3).

A present alternative to the elderly housing are "Granny flats". This term originated in Australia. It was first publicized in the United States by the Council on International Urban Liason. The concept of this flat is a small, removable cottage in the back or side yard of an existing single-family
house. The idea is to provide an independent space for the elderly person of the household, yet be in proximity to the rest of the family. This concept was successful among the Amish community who seek to preserve the notion of families living together. It has the advantage of being financially economical to house the elderly, compared to the cost of care and space in a nursing home. The idea of "granny flats" generated under varied names over a period of time. "Mother-in-law houses", "group homes", "accessory apartments", or "kangaroo apartments" (Peirce p3). Leo Baldwin, a Housing Coordinator for the American Association of Retired Persons, coined the term "echo housing; Elder Cottage Housing Opportunities." The name "echo" was in response to the objections of older men to the term "granny flats" (Hare 15-16).

Certain disadvantages are inherent in the idea of "echo housing". One of the prime constraints to this form of housing is the zoning laws of a city. This form of housing is illegal in most single-family home neighborhoods (Pierce p3). The addition of such a structure will change the physical form of the neighborhood. Hare also expresses concern for "changes in the public policy that would open up single-family neighborhoods to new social patterns." A common misuse of this form of housing is the use of the place by the owners, as an income generator. If zoning law permit these houses, owners often try to misuse the permission to construct an addition by renting the space to unrelated individuals. Under these conditions the owner of the house has little control over the space he has sub-letted.
These tenant(s) of the "granny flat" may not fit the personality of a grandparent.

With the impermanence of the "granny flats", cheap quality structure and poor esthetic considerations may govern the outlook of the house. This may reduce the overall quality of the neighborhood and make the "granny flat" undesirable in the area.

The positive side of this housing, is the notion of proximity of elderly people to the rest of the family. The economy of such accommodation will eventually prove beneficial to the entire family. With the isolation of this "flat" it is easier to maintain privacy and healthy relations among the family members. This space will also eliminate the uprootedness an elderly person might face in a vintage home run by the government. Sharing of the house site by the grand parents, children and grand-children have "practical benefits like shared housing costs, lessened fears of crime, companionship, and assistance with household chores" (Pierce 15-16).

An elderly person plays an important role in a family life. With old age comes maturity and understanding of life which may be important to share with other family members. The older people are however dependant on the young for some assistance. This dependency maybe either physical or mental. The elderly require greater attention in their life. Being around other family members at this stage of their lives become important to them. If they need any assistance, they are near family members who can get
immediate medical help. If they are away from the rest of the family, the
immediacy of getting help may be absent.

Elderly parents are also a help if they are around the house. They share in
some of the household work. They help in chores from cooking to
cleaning and being an emotional support to the family. Often they take
care of younger children in the house, if both parents are working. The
parents also feel safe leaving their children under the care of grand-
parents.

Above all the grand-parents are a part of a lineage. If they are isolated
from the family life, there is a disruption in the family cycle. This
ultimately proves detrimental to the solidity of the family. The grand-
children have no connections with their heritage. The adult children are
estranged from other family members.
APPENDIX-B

The design thesis begins with an analysis of three different architectural projects. A typical courtyard house in Old Delhi, Bye house by John Hejduk, and No-family house by Lars Larup.

The courtyard space is the intermediate zone between the private house and the public realm in Old Delhi. This space allows for different generations and various groups of people from the city to socialize in a common space. This quality of space has been displaced with "modern" city planning. The contemporary house plans often omit an intermediate space between the privacy of the house and the public street. My interest is in reintroducing the intermediate space in the modern house.

The Bye house shows the use of a wall separating one function of the house from another. Hejduk expresses the wall as an element that represents the present state. To him the wall is a momentary passage from our past to our future. Therefore the zone defined by the wall is not inhabitable. Given this premise I see the wall as representing the present stage of our lives. I would take the opportunity to use this present time as a link between our past and our future. In doing so the wall, to me, becomes more than a moments experience; the wall is a linkage and begins to form a space that is inhabitable. This space connects our past and present experiences. It is the first step in the forming of the intermediate zone. It is the place of entrance from the public to the private domain.
In a city or a suburban grid exists ordinary housing forms. Larup sees the potential of architecture within the grid by a "form" which is inserted between two ordinary houses. By his intervention of a "yellow lump" of architecture he begins to show a possibility beyond the repetition of single-family houses. By pursuing this concept, I intend to introduce an intermediate zone that alters the existing form of housing and that begins to allow for different degrees of social interaction between two houses and the family members within each house.

The program is a row of town-houses introduced on the edge of a residential neighborhood and a commercial strip in Houston. The town houses are designed for families which either accommodates the elderly and children or couples with children. Statistics have shown an increasing number of elderly who come to live with their children in their old age. With a decrease on the Federal subsidies for Medicare and Medicaid, a place for the elderly within a household is becoming economically attractive to many families.

The issues covered in the analysis of the three architectural projects, will inform the design of one prototype house from the proposed sequence of town-houses.

The initial design of this house looks to the site for cues to inform its planning. Presently the site has predominantly single-family homes with garages or garage apartment in the rear of the house. My design begins by
following the present footprint of the single-family house. The change is introduced by bringing the form of the garage to the front of the house. This makes the form not a residual part but an integral room of the house that can be inhabited. This room is linked to the house by an intermediate zone which is analogous to the wall which represents the present. This zone is also the entrance to the house.

Due to the nature of town-houses, two or more families within a house are separated by party walls. In this design, the party wall is replaced by an inhabitable space which is the shared entrance lobby. It is designed to separate as well as create a shared space for the two families.

Within the house which accommodates the elderly and the children, is a shared courtyard which allows for interaction between the family. This zone begins to influence the larger space of the house. The entrances and circulation within the house is extruded from the intermediate zone.

Given the design issues that are covered in the first part of the project, the next stage will involve the representation of the idea in the construction materials used throughout the project. The construction involves the use of materials that distinguish different functions of the building. The shared space by two families is made to appear light with steel, metal, and wire-mesh. These materials allow for certain degree of communication. The exterior of the house is masonry block, which symbolizes solidity and privacy.
APPENDIX-C

ANALYSIS, PRESENTATION, AND DRAWINGS
A Typical Delhi Courtyard
Bye House
No-Family House inserted in the suburban grid
Traps of No-Family House
Site Study Models
Building Study Model
Section and Elevation
Building Model
Building Model
JURY COMMENTS

The final jury consisted of Steven Harris, Yale University
Ellen Whittemore, Graduate School of Design
William Sherman
Eduardo Robles
Albert Pope
Anderson Todd

Steven Harris raised a question about the space which exists between two
townhouses in the project. To him it seemed residual and did not belong to
either of the inhabitants. The intermediate space lying between two
families could have been better utilized. He suggested the possibility of
grouping the town houses together such that they begin to form a
continuous mass. On the other hand separating the houses in such a manner
that they read as individual units. In the present scheme the houses fell in
between the two readings. With regards to the tower that stands in front of
the house which alludes to the garage apartment which once existed behind
the house, the tower had the potential of a stronger reading. It could be as
illusive as the "bride" wearing a veil, in the photograph. Due to her garb
she has the potential of different degrees of communication with the public.
Similarly the tower placed in front of the house could have had multiple
readings.

Ellen Whittemore agreed with the premise of providing the intermediate
space between two families to allow for multiple levels of interaction. She
also felt that the ways of living are changing such that there are more and
more families who have elderly living with them. However she was not
sure of buying the relationships between two unrelated families who have
to share a common space. She felt that the central space could take on a
more general function like the side yard instead of the front door. She was
also interested in seeing the relationship of the square window on the front
facade of the houses to the site.