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Dear Sir:

In partial fulfillment of the requirements for the degree of Master of Architecture, I herewith submit my thesis entitled, "South Boston Redevelopment".

Respectfully submitted,

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South Boston Redevelopment

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B. Arch. University of Michigan, 1957

Submitted in partial fulfillment of the requirements
for the degree of Master of Architecture.

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South Boston Redevelopment
A study of an urban housing environment.

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The program is set up to work within the area of urban housing and will be focused on the character of the physical environment of urban housing.

Before any assumptions or specific outline of the program can be given it seems necessary to point out some of the problems involved in setting up the program. There are several methods of attacking the problems of urban housing and methods of limiting the program to suitable scope so that a valid plan can be made. Several ends can be reached by these various approaches, and as the program progressed it became obvious that the objectives to be reached in the end be stated. As a way of further indicating the direction of the program, they are stated as follows:

1) That the area should not be one income level orientated.
2) That the environment provide amenities consistent with the needs and wants of the people, i.e., home ownership, small scale business enterprise within easy access, etc.
3) That the environment not be an island within an existing slum area.
4) That the existing visually strong identities remain as a part of the structure to be planned.
5) That the area be so structured that it will have its own identity or identities.
6) That the various elements involved in the environment be visually coherent.
In order to give validity to the program the problems of the site will be dealt with as realistically as possible.

Since the main concentration is to develop a physical environment of urban housing it was decided to abandon any approach which would lead to time consuming bypaths which might, in the end, be of little validity. A site will be chosen in the proximity of the urban center which is isolated from other major planning problems (expressways, etc.). The present physical environment will be analyzed, and a comprehensive plan for redevelopment will be prepared.

It must be kept in mind that the final form of the area will in no way be a statement of what urban housing should be. It will be related directly to the specific area chosen.

What is hoped to be gained is that the analysis and procedure in developing the final form can serve as a background for future use.

The following section will deal with the importance of housing in the proximity of the urban center and its problems.
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Why It Is Important

Several reasons for the importance of the study of urban housing are as follows:

1) In light of the fact that cities are continuing to grow rapidly and a large percentage of the people migrating to the urban center are low-income families, very little is offered in successful living quarters for these people.

2) The present state of physical environment in the central area for housing is not consistent with the needs of the people.

3) The fact that many times urban housing is low-income orientated leaving little choice for the other family types who might have varied requirements for living in the central area.

4) The fact that lack of adequate physical environment in the central area continues to threaten the problem of development in the fringe area.

   (1) The present level of prosperity is a negation of the continuance of slum areas. The level only makes their existence less excusable. Yet very few, if any, intensive methods of attack are now available for relieving the situation. Many of the areas are serving a transitory type of living condition. As the people improve their economic condition and escape to the suburban area many families are taking their place in an area which offers little personal initiative and responsibility.

   (2) Life in the usual housing project is not the way most Americans want to live, nor does it reflect our accepted values as to the way people should live. Whenever minimums are established
they gradually become standards, or figuratively, maximums. The "typical publicly subsidized dwelling is deficient in interior space, in outdoor living, and in true American residential quality. In fact, few of the amenities we have come to accept and expect in the usual single house are provided in the 'project' house. Families with children generally want qualities that the individual house offers. A yard, a porch, a terrace, are almost universally desired. Most of the people who have any choice are moving into single houses, but housing projects still persist in providing high-density, high-rise apartments with no outdoor space whatever." Such projects seem more suitable to people who seek and need temporary quarters because of their circumstance or people who do not feel the need of providing their family with an immediate physical area which would provide a closer tie between members of their family, in short, people who want little or no involvement with their surrounding.

A physical analysis shows that such housing projects tend to be very large and highly standardized in their design. Visually they may be no more monotonous than a typical suburban tract but their density emphasizes standardization rather than alleviating it. They are usually designed as islands, turning themselves against the surrounding neighborhood. This disregard only increases the institutional quality and any clarity stigma is thus reinforced, the fact that it serves the low-income group is obvious. Also since chaotic individualism was observed, these projects have come to embrace the recent doctrines of architecture. However, these theories tended to ignore certain subtler esthetic values and basic social needs. There is no room in the usual schemes for individual deviation, personal initiative and responsibility, for outdoor privacy and freedom, for the type of small scale business enterprise that plays an important social role in the blighted areas.
Part of what is needed then in urban housing is more choice in location, dwelling type, and neighborhood character.

(3) It is still true as it ever was that we need housing within the reach of families now outside the effective private market. However, the areas should not necessarily be limited to one economic level. A survey of people instigating redevelopment programs indicate the need of getting stable middle-income people back into the city. Urban housing should be flexible enough to permit varying family types. There is also very little choice for the family which increases its economic standing.

(4) Housing problems today are divided into two separate categories; one stemming from a need to revitalize central blighted areas; one the control and balance of the development of the fringe areas. The problems of the scattered development of the fringe areas were not only caused by economic policies which encouraged such development but through the fact that the basic environment in the central area did not correspond with the way people wanted to live.

Method Of Attack

Two methods are listed as follows:

1. One method of attack would be to pick one or two family types suitable to urban living, and in terms of some objectives plan their environment. A site could be chosen where density and land value
would correspond to these objectives. Several factors which could point out fresh approaches might be 1) the fact that future ownership and not continuous rental be offered low-income families, 2) inclusion of small scale business within easy access of living.

In such an approach strict attention to land value, density, administration, economic considerations and fairly extensive design of units would determine the validity of such a plan. It seems unreasonable that such an approach could be adequately considered.

2. As mentioned before one method would be to take a specific site, analyze its present physical environment and proceed to prepare a comprehensive visual plan for future development based on specific objectives.

Since the primary concern is the physical environment of urban housing, the following method is outlined:

1) Determine what objectives are being sought.
2) Pick an area suitable to these objectives.
3) Analyze the present physical environment, (visual form) and the potential.
4) Prepare a comprehensive plan for future development.

It was suggested that economic, social, and administrative factors not be strictly adhered to but kept within the bounds of reason.

By working with a specific site very real problems would be faced. The procedure in attacking these problems could provide useful research.
Data Required

This list represents only the data required for the general program. In the procedure other problems may occur which would necessitate extension of this list.

1) analysis of present visual environment
2) topography of site
3) present focus or connections with general urban region
4) main lines of circulation now existing
   a) public
   b) private
   c) commercial
5) non-residential facilities existing
6) people - density, number in family, income level, etc.
7) future use of area or non-residential needs which may alter any proposed plan
8) general housing types in area

The Site

Description of South Boston - the area for the program.
The original site, which was a hilly peninsula, has been extended by
successive filling of land to the north, south and east. Practically all the industrial land to the north and east is a result of this filling. All of Columbia Park and much of Marine Park is on filled land. The top of Telegraph Hill reaches a height of 145 feet and a small portion of East Broadway, near Independence Square goes up to 70 feet. There is much level land in the southern City Point and L Street area and most of West Broadway is comparatively level.

The street pattern laid out in the early part of the 18th Century was rectangular and unsuited to the topography. Most of the blocks were large (250 x 600).

There are three main approaches to the area,
1) Summer Street industrial area to the north
2) Broadway Street to the west
3) Andrew Square to the south.

Through any of these approaches the initial impact is the same - drab, smoky, uninspiring and lack of visual identity. The area falls into five separate neighborhoods, West Broadway, Telegraph Hill, City Point, Andrew Square, Old Harbor Village and Bayview. The dense drab housing, spotty housing, vacant area, the dignity of Thomas Park and Independence Square. The view of the harbor, the boundary of the harbor on three sides all present an environment of contrast and gradations.

History. With the industrial expansion, the area attracted large numbers of immigrants, mostly Irish. After the great fire of Boston people moved almost overnight into the already poor residential section to the west of Dorchester Street. Because of the close ethnic:
patterns of some of the groups, there is a feeling of loyalty to South Boston that is comparable to an individual's loyalty to his country. In other sections people move out as fast as they can afford to; it is almost a transient level of housing.

Potential. The relative isolation of the area, because it is a peninsula, is not upset by other planning problems (expressway, extensive expansion by industrial institutions, etc.). Because of its proximity to the Boston center, topography, and harbor view, it has a high potential for satisfying adequately the needs of urban living.
Tentative Schedule

Nov. 18-27
(1½ weeks)
Extensive analysis of present physical environment
(strong visual elements)

Nov. 29-Dec. 21
(3 weeks)*
Development of circulation of area (analysis of
focus, service, auto, pedestrian)

Jan. 6-Feb. 22
(5 weeks)*
Existing needs and indication of future needs of
area broken down:

- Housing types
- Small scale business
- Shopping
- Parks
- Schools
- Churches and institutions
- Industry

Feb. 24-Apr. 19
(7 weeks)*
Breakdown of area into groupings and visual study
of groupings as indicated by analysis, model stu-
dies, etc. scale, form, textures, patterns of
buildings

Apr. 21-May 17
(4 weeks)*
Assimilation of work done into a comprehensive
plan

May 19-27
(1½ weeks)
Extensive critique and re-evaluation of progress

Jun. 23-Jul. 19
(4 weeks)*
Refinement of plan in terms of re-evaluation

Jul. 21-Aug. 30
Presentation, models, etc. Problem, approach
and procedures outlined in booklet form.

Sept. 1-6
Final evaluation

* Critique at each stage
Conclusion

In terms of an existing area and the problems related to that area, a comprehensive plan for physical environment will be prepared. The design of the units will not be covered. Only their forms and the patterns that their groupings create will be studied in terms of the objectives sought.

It is proposed that the approach, analysis, procedure, and the visual plan prepared can serve as a background for future work. Problems such as how adequately human needs are met, how the inevitable changes can be met and guided may be illustrated.

For the purposes of the program other areas will not be extensively studied, other than housing because existing industry has not grown in the area and the only area now including housing and industry has been rezoned for nonresidential use. Industry will be assumed to remain in its present physical size.

Perhaps a second program could be developed which would investigate the possibilities of the units more extensively.
DATA BACKGROUND

Existing circulation, land use, condition of buildings and topography of the site were used for determining a design framework.

1. Circulation
The purpose of the study of existing circulation patterns was to determine the following:

a. How the interference between the defined paths of varying transportation types could be reduced (i.e., auto, truck, and bus).

b. What areas should be allocated to residential (will not be hampered by noisy truck traffic).

c. The main access or accesses into the area.

Both the main truck routes and bus routes and their average number of trips were plotted on the following map. The City Planning Board provided the main paths of auto traffic.

Truck traffic is heaviest around the northern fringe and also along Dorchester Avenue. There is also considerable truck traffic bisecting the residential area along Dorchester Street and D Streets.

By limiting First Street to truck traffic and providing access through the southern industrial section west of the residential area, truck traffic could be reduced in the area. It was also proposed that the amount of truck traffic crossing the area could be considerably reduced by the new expressway which will have access at Broadway.
Bus routes and their number of trips through the area were provided by the MTA. The need for limiting the interference between public and private transportation is too obvious to mention. The majority of the trips are made to and from the Broadway Subway Station. A northern route which serves the industrial section also comes into the area. The Subway Station at Andrew Square primarily serves the section south of South Boston.

A loop route within the residential area and serving only this area could provide more efficient service. If the route that it traveled led only to the subway station, auto traffic along this route could be considerably reduced. Bus routes which originated from the subway station and bypassed the residential area to serve the industrial sections could also improve the efficiency of the MTA system.

The main paths of automobile traffic were provided by the Boston Planning Board. Broadway, Columbia Parkway, L Street, Dorchester Street and Dorchester Avenue carry the heaviest traffic. Between these streets lies a grid system which along with the continuous row houses intensifies the monotony of the area. The lack of a street hierarchy provides a lack of strong image in the area or a lack of being able to orient oneself easily in the area. Broadway, with its many shops and activities and Columbia Parkway along the waters edge are the strongest streets in the area. (See illustration.)

2. Land Use
The land use survey of the area was provided by the Boston Planning Board. The mixed pattern of land use along both the northern and western sections indicates the lack of a boundary between the residential and industrial areas. Industry is creeping into these areas.
The effect it has on the condition of buildings along these sections will be noted.

The sections north of 2nd Street west of the Old Colony Housing Project and south of this project should be zoned only for industry. The remainder of the area has remained fairly clear of industry with only minor exceptions. The commercial district has strung out along Broadway, which was probably a street car era development. There is a need here of clustering this string development in order to make strong centers with one center being dominate, serving as a center for the entire area. Also strong boundaries around the residential area will serve to insure land values of such areas. (See illustration.)

3. **Condition of Building**

This survey was made in the field. Also an earlier study by a City Planning Major served to aid the survey. This study indicates that the area west of Telegraph Hill is in need of redevelopment while the area to the east of the point needs only rehabilitation. The houses along the parkway and around the area of Independence Square are in good condition and need no rehabilitation. Along First and Second Streets the houses have considerably deteriorated. This is undoubtedly due to the lack of amenity which these buildings have and the fact that they are in the immediate neighborhood of industrial development. (See illustration.)
4. **Topography**
Possibly the strongest indication of the potential that the area has can be indicated by the topography model. The area around Telegraph Hill has the most potential for development. The existing buildings around this hill have taken no advantage of this site. Both Telegraph Hill and Independence Square, since they are the highest points serve as strong images for the purpose of orienting oneself within the area. These should be reinforced. The existing expression of Telegraph Hill is good. The low buildings, (two and three story) which climb the hill give a strong expression of the hill. This expression should be maintained. (See illustration.)

5. **Social Factors**
The section is now a strong Irish district with a few other groups such as the Lithuanians and Polish. These people have their own churches and schools. It is felt that this social environment should be reinforced. Presently there is a great lack of common get-together space, and the back yard over-the-fence type of contact is carried on in a very bad setting. Streets and alleys are very poor substitutes for playground activity for any age.
FORMULATION OF FRAMEWORK

What it is.

The main purpose of establishing a framework to the area was to make the area more comprehensible through the shaping of exterior physical forms. In other words, to establish a framework that would allow a number of references to exist within it that would allow an ease of orientation. As a further means of explaining what is meant by this framework it would be analogous to establishing a strong unifying framework for an apartment building or housing complex and yet permit a rich variety for the individual expression within this frame.

What it must do

1) The framework must in no way establish a final unchanging form, but rather, it should permit a continuous succession of phases to occur within it.

2) It must be strong enough to establish a coherence between and relate the various elements that make up residential living.

3) This framework must permit the existing good buildings to remain and still function satisfactorily.

4) It must permit each housing complex to have its own expression just as the individual units have their own expression.

5) It must reinforce the existing strong images within the area and support the social climate of the area.
This is the basic idea which has been carried throughout the problem. It was felt that if the neighborhood was well structured then the method of building continually into this established framework could last indefinitely.

How can the framework be established?

1) By circulation:
   Possibly the simplest way to establish this framework is to begin to establish a hierarchy of the street system.

2) By land use:
   Another method is to strengthen the boundaries between unrelated land uses. (This may be a function of circulation) In the first stage a paper plan for this framework was developed. (See illustration.)

Hierarchy of street system

The existing circulation pattern illustrates the interference between the various transportation types and the existing grid pattern indicates the complete lack of such a hierarchy. In the circulation proposal for the area an attempt was made to give a strong identity to the boundary of the residential area. The north street would serve as the number one street providing access into the residential area. It also serves as a boundary between the northern industrial section and the residential area. Truck
traffic serving this area would have access to the industrial section along First Street. This isolates trucking service from access to the residential area. Access to the southern industrial section would be west of the housing project at D Street. It was also expected that the opening of the new expressway would reduce truck traffic through the area considerably since access to it will be at Broadway. Access into the residential area would be by alternating north-south streets. These would be the number two streets. This was done to reduce circulation in the east-west direction and strengthen the access streets. The alternating streets then could be closed off for pedestrian use. This would improve the residents access to the beach, providing a better relation to the land. At the end of these pedestrian paths, as they cross Columbia Parkway, overpasses would be provided. This path is broken by the bus route making access to the bus stops, which occur at the pedestrian paths, more convenient. This reduces the interference of public transportation from main automobile traffic lines.

Certain assumptions were made after the initial data had been gathered. These assumptions began to channel the effort and form a basis for decisions to be made.

1) The same density will be maintained.

2) New people coming into the area would come because of the amenity of being close to the urban center.

3) The new people may not be of the same ethnic background as those presently in the area and would require more of certain amenities, i.e.,
schools, better shopping.

4) That row housing can offer unlimited possibilities for "good living" (see appendix A).

5) Industry will remain stable and will not require more land for expansion than is already indicated "industrial".

6) That the prevailing occurrence of tenants with families in the better parts of the area buying their homes and the people living in bad sections moving out of the area indicates a need for providing some kind of project which will allow the people to buy their homes if they desire.

7) That this predominate pattern of families will remain but within the area a number of permanent rental units would be established.

8) That a core - a center of commercial and social activities is needed - one that would reflect the large number of activities which predominate in the area.

Rehabilitation and renewal

The area has been broken into one of rehabilitation and renewal - rehabilitation to the east of Telegraph Hill and renewal to the west.

A large percentage of the housing in this east section is now deteriorating, particularly in the interior sections. Housing lining the shore line is in good condition and little rehabilitation will be required. The main part of the design study dealt with the rehabilitation problem for this area.
Program for Building

The condition of buildings survey indicates the present structure of the rehabilitation area. The blocks, approximately 200 x 500 are surrounded almost entirely by row houses, duplex houses and a few unattached houses. The majority of these houses are two story structures with three story structures in certain sections.

A proposal was made that as the present deteriorated houses and the houses which will soon be in a deteriorated condition, that these houses be built over in a particular arrangement. A number of these could be built over retaining the same separation walls. The interior would be gutted and built back new. Such a proposal was made by the Philadelphia Planning Board but a design for such a proposal was not carried out.

As the houses became deteriorated they could be condemned as many already have in the west section of South Boston. They could be taken over by a housing authority which would rebuild the house and then rent it to the same occupant or a new occupant. He would also have the opportunity to buy the house if he desired. The families then which purchase their own home as their income goes up serve as example families. They do not have to move out.

Within these blocks the density would naturally be reduced. However, in certain blocks where the majority of the houses were in bad condition, four story walkups could be built. These would be on a permanent rental basis. This would also permit the density to stay as it is.
It was also proposed that the density around the Hill area could be considerably increased. This area is designated renewal by the Planning Board.

As such, the rehabilitation would be "public housing" but not public housing built as an institution, but scattered throughout the area. The houses which are in good condition would remain.

The density, number of swelling units in single houses and the number of dwelling units in the rental units was to be established through the design.

**Housing Design**

The majority of the houses, whether they are of the row type or whether they are duplex, have a particularly consistent form. The width of these houses is fairly standard, they vary from 16 to 20 feet. The front doors of these units alternate in pairs. The duplex units have side entrances for service. In the back yards of these houses there is little, if any, activity. There is no privacy. Everyone can see into every bodies back yard from upstairs windows. Some of the houses have fences and some don't. Many materials have been used for these fences. There is little unity and the whole character of the interior of the block is one of confusion and chaos.

There is little chance for any gathering as the fences separate facing houses. The street side has become more important. There is some order here. The design indicates how the existing walls between the units could be extended to form a frame for each house. Within such a frame could be a rich variety of expression.
In the rear the wall has been extended seven feet beyond the present wall. A wall is also extended around the rear yard. By doing this the garden of each unit becomes almost entirely private. By building such a wall the people can also have an expression within this. From this they would then have access to a pedestrian way and pedestrian court. According to the slope the garden would be on a lower level or on the same level as the ground floor. Some of the houses have basements and others do not.

The plan for this house has a service entrance and main entrance on the front. Refuse could be stored behind a low wall in front of the service entrance.

These service entrances and main entrances occur in alternating pairs repeating the same form. (See illustration.)

These units contain approximately the same amount of square footage as the existing duplex and row units. (1370 sq. ft.)

Organization into Complexes

The majority of these units would be rebuilt in such a way that they would form small pedestrian courts. (See illustration.) Approximately 62% of the existing houses would be rehabilitated or left unchanged if they were in good condition. 38% would be torn down entirely.

The new houses that were built into this complex would occur within the center of the alternating streets and would begin to close off
the interior of the blocks into small pedestrian courts. This would serve as a social area for the people and playground for children.

Within each of these complexes would be two such courts. The houses surrounding the courts could have a variety. The new units would be one story and in certain cases there would be three story units with parking on the first level.

Parking for the houses along the north-south through streets would occur at the end of the block. These people would have access to their houses either by the pedestrian court or along the street.

At one corner of the complex would be a corner store. It was felt that such units were important in the immediate area. Both because of convenience and for social reasons.

It was felt that the center between the complexes might be a more suitable place for this activity. However, activity that takes place around these corner stores enjoys watching the passing cars.

Parking for the other units is directly in front of the units or in a parking court.

From the pedestrian courts there are paths to the main pedestrian path which leads to the beach and to the public transport types.

**Rental Units**

A number of blocks within this rehabilitation area are almost entirely in a deteriorated condition. It was felt that the units placed on these blocks could be 4 story walkup units, taking advantage of the
southern view. These were kept low because there is no view to the north and because the expression of the hills could be made stronger. These units take care of the unrelated individuals, young married couples and the older couples without children. These would be efficiency, one and two bedroom units.

Access is from parking on the north to a second level with two levels above and one below.

PLAN FOR THE AREA

The problem was to take an existing urban housing environment ... one that is in need of rehabilitation and renewal ... and one that is presently lacking in visual strength. In other words, an environment that is confusing and difficult to orient oneself in. The present grid system with the same size blocks and the similar houses almost surrounding each block presents a dim image of the environment.

The main objective was to establish a plan for restructuring this area so that one can find his way around with ease in the area and also begin to have a sense of understanding his environment better.

Beyond this were objectives of working with and understanding the problems of rehabilitation and renewal and solving the design of a particular urban housing situation.

The data of land use, condition of buildings, topography, existing circulation and social factors were studied. Then certain assumptions were made from this data as to density, housing types and the kind of environment that was desirable.
The main references within the area are the two hills, particularly Telegraph Hill. However from the north, one is almost unaware of this hill. Along the ridge that connects these two hills are a number of churches, church schools, and public schools. It was felt that a park connecting these hills would serve to strengthen their image and also provide contrast for the housing built on the ridge grid system. Since a number of the churches would be on this park it could also become very important of certain religious holidays.

The housing complexes and the walk up units were arranged according to the condition of building survey. The walk up units were arranged to make the most of the view but to also give a dominance in the east-west direction. Presently there is little differentiation between the views toward the beach looking east or south.

The housing complexes are arranged in such a way that they can have their own identity. In many cases plans are made of one such complex and it is then repeated indefinitely over the area. It was felt that in each case the surrounding environment would be different. The street character could be quite different particularly because of existing functions which remain on them. The character of the pedestrian paths which intersect them could be quite different just as the character of the pedestrian courts which the houses surround could be different.

Also the existing houses which remain unchanged serve to differentiate. The housing in good condition along the fringes and around Independence Square would remain. Little rehabilitation, if any, is needed here.

The houses on the hill site would have a higher density than presently.
Commercial Development

The majority of the commercial development lies along Broadway as far as L Street. In order to give a certain strength to this development two areas along this line could become more concentrated providing sub-centers of activity. Around the Hill Area this could be developed as the main commercial area, as a core area connecting the two sections. These sub-centers and core areas were developed where the main commercial activity now exists. It was felt that the remainder of the shops which are marginal businesses should be rezoned.

The social and cultural center of the area could lie directly south of this toward the hill. At present, because of the similar ethnic background of these people it was felt that many of their clubs and organizations could be established in the existing houses in this particular area.

It was felt that these should be one and two story units terraced into the hill. The roads wrapping around the hill allow access to these units. Paths from the parking courts connect the terrace walks on which the houses face.
APPENDIX

What are the social implications of the row house?
What are the social implications of the row house? Does it have appeal for one economic, social, and family type? How can the social implications be effectively analyzed? What are the real issues this dwelling type presents? How can these issues be better understood and who can begin to provide the answers that are needed?

These and other questions were raised in the beginning to analyze what the row house really is. Obviously it was assumed that the row house has great potential in the field of housing, else why the topic?

It seemed necessary that such questions needed answering before (1) the designer can understand what the real problems are in order to concentrate on developing solutions for these; (2) the full potential of this dwelling type can be understood.

For instance, why not the row house in the suburbs? If it does have appeal primarily for the low income group then the argument could be substantiated on grounds that these people do have cars and the many factories which have moved out from the center can offer a place to work. Also more balanced housing areas can produce a more balanced tax-base.* Beyond this it has the aesthetic possibility of breaking the monotonous pattern of single family homes on small lots which is characteristic of so much of suburbia and could serve to more effectively organize the area visually.

Also the row house has the potentiality of solving the public housing problem. If ownership is desired, or if only the symbols of ownership are desired the row house has the potential for serving this market.

Perhaps the row house could just as effectively serve the needs of the

family who seek their solution in the single family house.

But what of the social implications? Unless these are understood the potential and the real problems will not be known and little will be done beyond the ameliorating of poor living conditions.

An attempt was made to try to analyze the factors inherent and associate with the design, to try to find out what the main issues were, how these could be better understood, and to try to find out how these could begin to be worked out.

From the point of view of the designer, the row house has many merits. It contains more of the essentials of living and fewer of the extravagances and superficialities than most other types. It utilizes materials more efficiently (the Eastwick developers indicated that the cost of the unit built as a row house would be increased 50% if built as a detached unit).* It cuts the cost of the frontage one third and thereby the costs that run with the land. Residents can live closer to the center of town. Probably one of the most important assets is the fact that it provides a ground level home with a yard.

But there is still a strong prejudice against the row house in many sections of the country. Even when the architect has been concerned with the row house design, it was usually with the implication that it was something for which to apologize.

The prejudices could be broken down as follows: (1) The prejudices that are inherent in the type of dwelling unit that it is; (2) the prejudices that are associations that have been built up with the use of the row house; (3) the prejudices that are a result of the design of the unit itself. Perhaps these are overlapping factors and reinforce one another but they have been separated for purposes of analysis.

* $12,000 for the attached as opposed to $18,000 for the detached.
Factors inherent in the type of dwelling unit that it is:

Regardless of the layout of the row house it produces small yards and closeness to neighbors. Designers have checkerboarded the houses back and forth in an attempt to negate the "row", but even so, very little can be done to eliminate these factors without eliminating the row house. But is this really bad? In the typical suburban subdivision actual use of the yard area may be just as small. The row house can actually have more privacy than the individual house in the suburb, i.e., the activities of the neighbors may be more easily observed in the subdivision. Perhaps the closeness is more theoretical than thought of.

Beyond the factors of closeness to neighbors and the small yards the traditional row house provides a more or less standardized unit. Very few, if any, development exist where a wide variety of units are provided. This relative consistency of unit size and character usually produces a highly homogenous socio-economic community. Perhaps it is too homogenous. But in many of the typical subdivisions there are row upon row of individual houses which may produce just as much of a highly homogenous socio-economic community.

The typical developments are usually highly monotonous. Houses lining both sides of a block with an alley between — and many times block upon block of these. The relatively standard unit emphasizes this monotony. But in the typical subdivision the row upon row of individual houses may be just as monotonous. (Levittown). The point is that it has really failed to give any significant opportunity for individual expression that the people desire. Or if it does not limit them it may, present a very disorganized confusing area. The standardized facades give very little opportunity for any kind of individual identity that the people may want.
Factors associated with the row house:

Row housing has deserved a bad name because it lends itself so easily to a sweating of the land. The early speculative builder overworked the land in such a way that the amenities of parking and open space were ignored. But if properly handled the row house provides an ideal way to work the land.

Because it answered the housing problem quickly during earlier periods of immigration to the city, it has the connotation of temporary housing in many sections of the country.

Many of the row housing developments were built close to the center of the city. As these buildings aged and deteriorated and became less desirable many of the middle income families left for the suburbs. Lower income groups moved in, but because the land value remained high due to greater convenience, the lower income families used the buildings more intensively. They became tenements very fast and they became associated with low income groups and all the implications that go along with this group.

Because it utilizes land and materials more efficiently it is economical. The differences in cost between the same unit built as a detached unit was pointed out. But many plans have been made (in architectural schools mostly) which treat the row house in a very elegant way. In certain sections of cities they are associated with upper uppers. But very few people have had contact with these exceptions and very few have really seen an up-to-date version.
Factors inherent in the design of the unit itself:

Few, of today's, row houses provide the kind of internal space that is desired today. If there is a need for a closer tie between the indoors where the mother is doing the housework and the outdoors where the children are playing, the typical row house does not provide this need. The small back yards have very little privacy. They are really semi-public. But is there really any more privacy on the subdivision lot? They are just as semi-public as the row house unless the owner builds a high fence around his lot.

Services are made in the same manner but very, very few provide on the site parking.

In order to understand the real issues a more critical look at these factors could be made.

Small yards: Actually many families in the subdivision may not want the actual responsibility of so much yard. Could the amenity of open space in close proximity count as much?

Closeness to neighbors: The actual and theoretical closeness was pointed out. Depending on proximity the closeness can become more acute by having side windows.

Associations: I will assume that these associations can be broken down because few people have seen an up-to-date version. Perhaps this is a gross assumption.

Internal Design: Obviously the designer is adept to handle this problem.
Privacy of yards: This is another point that designers can battle with.

These are factors that could be worked out. What seems important then is the way an opportunity for individual expression is built into the development and the scale of the development. These issues are not really different than the problems of any other housing type.

The way scale is used can serve to exaggerate or reduce the monotony of the areas. But what is meant by scale? There appear to be two arguments which are applied to the broader question of integration and segregation.

Weimer and Hoyt* state without qualification: "The various groups in the social order tend to be segregated into definite areas according to their incomes and social positions." They also present a diagram of a "City of the Future" based on Hoyt's sector theory, which shows all development of homes spotted along eight spokes radiating from the center.

Quinn also states: "... residences within a given economic range tend to cluster together in the large, growing metropolis. This clustering arises in considerable degree from the fact that money value of a dwelling depends on the economic grade of the other homes in the area, especially those immediately adjacent." Builders tend to build their homes in districts of equal or higher value... while owners of existing homes want to protect their own investment.

This tendency begins to justify the grouping of homes on an economic basis but there may also be a justification on a social basis. A

* Weimer and Hoyt, Principles of Urban Real Estates.
feeling of belonging or identifying oneself with a particular area may have strong preference. The grouping of a few standard dwelling types may foster congeniality within the grouping.

However, the scale of how to handle this segregation is not expressed. Obviously the assumption based on the existing tendency can perpetrate an overgeneralization. The city, as in the Weimer and Hoyt example, can become a highly compartmentalized whole with each socio-economic level isolated.

The large suburb subdivision can be just as easily recognized as an institution as the row house development or as the public housing project. What is it that makes it so recognizable?

Another argument is presented by Catherine Bauer. "One class neighborhoods are bad" but she does not qualify the neighborhood. She does not qualify other terminology such as "lack of exclusiveness", "variety", and balance. These may sound good but what do they mean for the designer. His problem is putting them into three-dimensional terms.

An argument is made on the basis of continued need for occasional help. She states that this problem can be worked out more effectively with a representative balance of different kinds of people with different talents and training in a given neighborhood. This seems a pretty weak argument.

However, other argument can be made. What of the children who grow up in the highly protected upper middle class suburban communities and those that grow up in the highly isolated slum areas? Poverty and slums are as vague abstractions for the one as wealth and economic security are for the other. The recent New York Times series on juvenile delinquency also illustrated this point.
But again, in all these arguments there is no sense of what the scale of integration and segregation should be. In any case, it appears that too much integration is as bad as too much segregation. But this is so much of a generalization that it really means nothing.

If any one housing type continues endlessly its institution is exaggerated and its monotony is more apparent. Is it not important then to try to begin to understand the scale of any given housing type? Perhaps this is getting away from the subject of the row house but the concept that any given housing type has a scale may be sound. In other words, there may be an optimum size of any given housing type beyond which its institution and monotony becomes exaggerated.

The matter of building more opportunity for individual identity and expression into the development still remains. This seems to be a fairly universal want. The duplex with one half covered with one material and color and the other half something different illustrates this point. (South Boston serves an excellent example.)

Perhaps more privacy in the row house yard could begin to serve this need if it were handled in such a way that the people felt less limited in their expression and yet the variety that could be achieved would not confuse the area. Perhaps the way the facade was handled could do this. Such means could offer the opportunity of having a consistent character that unified the area and yet achieved a variety and richness that would begin to negate the institution and the monotony.

Perhaps only the sense of ownership is desired. Individual doorways may provide this or there may be other symbols that provide this.
Perhaps it is a sense of shelter that is important. But who can really answer this? Accumulating data that would begin to justify design decisions is very difficult. The designer is often so interested in being able to justify his decisions on data background that he begins to ignore the fact that the existing environment is full of these symbols.
TYPE B

ELEVATION