CAUSES AND EFFECT OF DETERIORATING SECTIONS OF A CITY (SLUMS) FOR GREAT FALLS, MONTANA
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FOR
GREAT FALLS, MONTANA

UNDERGRADUATE THESIS IN ARCHITECTURAL DESIGN

BY
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Dear Sirs,

I am submitting this thesis book as partial fulfillment of the requirements for the Degree of Bachelors of Architecture at Montana State University, constituting the final phase of this project.

Sincerely yours,

Daniel E. Fairchild
It is the intent of this project to begin to formulate a new theory to control the building process so that the same mistakes are not made again in the future as were made in the preceding eras.

For example, in the past some cities in trying to deal with the urban problems have continuously made and continued to remake the same errors that they made in the past. For example, the problem of slums is a serious problem, but they have not seemed to have learned from their past errors. They continue to treat the symptoms rather than the real disease. They continue to apply first aid rather than preventative medicine. It is my hope to begin to formulate an answer to some of these situations. Surely it is reasonable to presume that there could be certain parts of any particular present living pattern and buildings that have things about them which are good. It is also possible to predict that there are many elements that are bad about living environments. In many of the
urban renewal projects, everything has been torn out and entirely new projects built, but the very real problems may be reincorporated in the new project just as they were evident in the old. In most situations no one takes the time to make an in depth study into what those problems and good features might be. If they had, then it would be a natural process to elementarily eliminate the bad and reincorporate the good into a new situation or project.

An example of a symptom is deterioration and the normal way of handling this situation is tear them all down, but if one is really concerned about the problem then it would be natural to do an in depth study into why the situation got to where it did so that, it wouldn't happen again in the future.

First, let us establish that deterioration is a natural cycle of buildings, and the building materials that we build with today. It should also be understood that deterioration does not
densities, land use, transportation, economics, ways of living, in the types of inhabitants, etc. These changes occur anywhere at anytime; in parts that have already changed greatly and also in parts that have changed little over a long period.

If we take any part of our urban areas and begin to face this change and the problems that go with it in a static manner, for example, by re-establishing green belts, for green belts sake, as conceived in the past, a few years will show that such a static design and concept can not save the city or even part of its periphery. We have only to think of how it was ten or twenty years back, and how it is today to understand that it is unrealistic to expect the city to remain much as it is today ten or twenty years from now. As long as the city is dynamically changing and this dynamic change affects all its parts, and as long as the dynamic change of every part means a changing structure, it is not possible for the resulting acute problems to be solved
by means of static urban renewal projects. It is also important to realize that most of these projects are started from a position of understanding what can be done, and not from a position of determining what is good or bad about previous situations. This information will show what should not be done. This approach also begins to establish the priorities to any particular approach.

There are many underlying causes for a present urban situation, and because of these underlying causes, it is naturally assessed that there is a need for urban renewal. The mistake that many have made is that they have reached the conclusion that every problem results from the constant deterioration of our urban way of life which are results of the changed occurring continually within our urban areas. But someone must have missed somewhere that really there must first be an attained level of good before any situation can begin to deteriorate. Many of the things wrong with our urban situation is that they have been bad
all along, or at the very moment they were instigated, and it has only taken time to show or prove their real colors or effects.

But it is also true that there has been levels of some good before these areas began to deteriorate. One of the reasons behind this is the great advances in our technology have prevented us from realizing fully how great has been the deterioration in our way of living, and our urban areas. We are only now beginning to understand this break down as a major problem of this century.

There is also another fact that has only helped to add to the problem rather than solve it, and it is because we are facing the problems of changes within our cities by applying only first aid rather than by using preventative medicine. If we assess the role of Architects and planners on the same basis of a doctor then we should begin diagnosis before treatment. We can no longer continue to treat dynamically changing conditions with static solutions.
There is no doubt that the situation within our cities is changing much more rapidly now than ever before. This is what we can call a dynamically changing situation with an increasing rate of change. On the other hand, urban renewal projects have been conceived for certain parts of the urban area for a certain size of population, and the corresponding economic, traffic, and other conditions. This is planning a static situation, even if the urban renewal project has anticipated a reasonable increase of population growth income, traffic, and so on. This projection all leads up to a certain moment in time, let us say, the changes anticipated in ten or twenty years, and it will not be satisfactory beyond that time limit. Thus, the urban renewal project is conceived to solve a certain defined problem, where as the problem is always continuously changing.

If we look to history we can begin to derive and ascertain patterns for city development.
which can begin to understand our present dilemma.

Historically there has been a pattern of development of cities, specifically American cities, which has been graphically portrayed on the next few pages.

During a period of 1770 to 1820, the American city begins, and it is also the real beginning of modern cities. Also, during this period of time the United States is involved in the exploration and settlement era. America is much different than most countries in its pattern of development. First, it is relatively rapid, and second, it does not have a historical past to base or center a community theme upon, therefore, it is one of starting from scratch, or one of trial and error. The industrialization period begins to act as the major drawing factor of people to the cities. These people are those who already had been settled for some time and have found it extremely tough to make a go of it on the
small parcels of land they had, and so they begin to look for new chances and new starts. Inevitably they see the city as a place for a better life, increased income, better services, more and better jobs which are being born by the industrialization period.

Along about 1820-1900 (the era during which my city of interest, Great Falls, Montana was established), known as Stage 2, there is a continuum of people concentrating in the city. Because of the invention of modern transportation such as the railroad there begins a period of some decentralization along these routes.

About 1900-1939 or Stage 3 begins. Because of the preceding period of concentration or people begin moving to the centers of cities because of the proximity to work, services, etc. There is also a certain amount of congestion, and it is at this time there begins a period of decay in the inner ring. Because of these factors, congestion, high densities, etc., and there is
also a certain amount of unplanned decentralization.

Stage 4, (1940-?), is ambiguous in its dates, but is considered to be the post war period. During this era there is some planned disbursement or decentralization to newly developed and planned neighborhoods, and even new towns and communities, but most outflow is haphazard and uncontrolled. Because of those factors the center of the city begins periods of comprehensive inner area development.

Stage 5 (?-?), here again, the dates are extremely hard to determine. During which most cities begin attempts to recreate themselves, but because this is an entirely new chapter in the history of the modern city, there is no information to base designs and decisions upon, unfortunately, many are done either very badly, or are error ridden.

Then theoretically Stage 6 (?-?) begins. It is still a period of some guesstimation, but now with new information and approaches,
with some planning guidelines, the city takes on new characteristics with a completely different redeveloped centers, institutions, and appearances.

At one time before the advent of the Industrialization Age, cities only had small parameters of width and length, but the introduction of elevators, etc., they began to shape a new parameter of height also. Because of invention during this industrialization period of new transportation, communications, etc., they were introduced to the time factor, especially since severe amounts of congestions, high densities, and increased city populations cause severe spreading and sprawl in height, width, and length.
1770 - 1820

THE MODERN CITY BEGINS -
INDUSTRIALIZATION IS THE
MAGNETIC IMPULSE
1820 - 1900

CONCENTRATION - SOME

DECENTRALIZATION ALONG

RAILWAYS
1900 - 1939

CONGESTION - SOME DECAY
IN THE RING - UNPLANNED
DECENTRALIZATION
1940 - ?

POST WAR - SOME PLANNED

DECENTRALIZATION TO NEW

TOWNS - COMPREHENSIVE

INNER AREA REDEVELOPMENT
STAGE 5

THE CITY BEGINS TO RECREATE ITSELF
STAGE 6

THE REDEVELOPED CENTER
AREA HISTORY

The Louisiana Purchase of 1803 by the United States from France, set the stage for the Lewis and Clark expedition. These men and their crew were the first known white men to ever visit the Great Falls area, and they were in fact responsible for naming of the area that particular name. The name Great Falls was appropriately attached for the series of seven magnificent and beautiful fall within a 11 mile stretch of the Missouri River.

That expedition paved the way for a flood of explorers, trappers, and traders to the area of Montana. Many of whom travelled by water up the river to the area now known as Fort Benton. This position a center for overland expeditions through the Great Falls area to the Rockie Mountains.

In 1881, Paris Gibson, an engineer for the railroad, visited the locality. In May of the following spring, he did extensive
surveying and recording of the town of Great Falls. With the help and backings of James J. Hill, an owner of the Great Northern Railway Company, they incorporated the Great Falls Water, Power, and Townsite Company. The town was incorporated in 1888 and Paris Gibson was elected mayor, a position he held for several years. Because of Paris Gibson's fine foresight the community he started was located in a unique position. First, of all two of the seven falls are located in the limits of the city. Second, three more of the falls are within three miles of the town, and the remaining two are within five miles of the city. Third, the world's largest fresh water spring, called Giant Spring, is within 1/2 mile of the present city limits and today is one of the major recreational parks in the area. Fourth, two of Montana's major rivers, the Missouri river and Sun River join together within the city. Fifth, two
of the states major railways, the Milwaukee and the Great Northern, were planned to cross in or near the Great Falls area. Sixth, large amounts of public space, parks were planned for along the rivers for all who live in Great Falls to enjoy. Seventh, wide streets were an integral part of his original plan, and as of today very few have had to be altered. His original plan, was very simple, but provided all the necessities. All the streets were established on a straight North to South and East to West relationship. Eighth, when Paris Gibson was doing his surveying and recording, he noted the richness of the land surrounding the area and predicted it to be a major agriculture producing center. Infact, in 1885, Paris Gibson built the first meat packing plant and first flour mills in the area. This was some two years before any agriculture was actually started to produce.
Much of the development of this area can be directly attributed to the vast hydro-electric capabilities of the area.

Later Anaconda Copper Mining Co. realized this potential and located a smelter in the area which began a period of major economic growth. This plant has for over 70 years provided jobs for a large amount of the population in the Great Falls area.

Malmstrom Air Force Base just east of the city limits, which was established as a bomber training base just before World War II, has also played an important part in the recent development of the area. This air base currently serves to act as a control center for a vast missile complex located throughout northern and central Montana.

The particular area that I am studying, is one of the original tracts of land surveyed by Paris Gibson, and incorporated in the original townsite of Great Falls, Montana.
The earliest residential growth areas was in areas immediately adjacent to the central business district was begun. The building development tract to the south is the area of my interest and study.

Most of the buildings were built by or for middle class people in about five years of each other. This area stretches from 1st Ave. South to about 9th Ave. South and from 1st Street East to around 9th Street East.

It appears now that the middle class people continued ownership of their property in that area until after the War, in the 1940's. At that time, just after the depression and the war, a new era of prosperity began. These people slowly began to realize a higher standard of living. As this took place, a very complex set of circumstances, I believe, occurred which caused a slow exodus of these people to newer areas of the city.
Because of that mobility to new areas, it left the area of interest in a serious economic and social squeeze. Subsequently the area became inhabited by poverty level and low income families. It continued until today to constantly deteriorate to a level which it is in now, and in my opinion, a serious safety, health, and social hazzard and a complete eye sore to any other wise fairly nice city. For all intensive purposes, it can be considered a slum or ghetto.
There are numbers of things in areas of cities and neighborhoods with which the inhabitants identify are the very essence of the life for the populace. Many of these things in new projects have been eliminated and therefore, have eliminated the respect from the people who depended on these things as necessities.

One of those social institutions is the city street. When mentioning the street, I am not refering to the normal definition that most of us understand, but instead, I am referring to the physical setting and the social structure or the life style that takes place in that setting.

A common mistake of many new projects is that of adopting middle class preconceptions and forcing them upon a group of people who do not identify with the same things we do. The city street is one of the very mistakes that many architects have misjudged and misused when instigating new urban renewal projects. In most cases, the middle class populace, preconceives the street as a
horrible place or setting which is depicted by the trite expression "let's get the kids off the street".

Many old projects that were originally designed and built for the middle classes, have been abandoned by them and have eventually been secured by the lower classes because they had nowhere else to go. But many of these middle class projects have not contained the necessary needs of the lower class people. For example, middle class areas do not contain the same institutions that are needed for the poor.

I suspect, because people are poor from birth, and most of their lives, they have different values, and needs. Taking this into account, plus allowing for the fact that they use spaces much differently than we do, it is reasonable to presume that they also find it very difficult to adjust, or comprehend exterior spaces originally built and designed for the middle class. This may also account for the existing situation of the poor in my particular area,
who seem not to use side and back yards or even the large, general open parks.

There are reasons behind why many streets have become very unsafe but, there are methods by which one can reduce the incidents of crime in these areas.

There must be a clear demarcation between what is public space and what is private space. Public space and private spaces can not ooze into each other. It is important to integrate a balance between the private and public sectors which within the social structure of the city street.

There must be eyes upon the street, eyes belonging to those we might call the natural proprietors of the street. The buildings on a street should be equipped to handle strangers and to insure the safety of both the residents and the strangers. All these buildings must be oriented to the street. They can not turn their backs or blank sides on it.
The sidewalk must have users on it on a fairly continuously basis, both to add to the numbers of effective eyes on the street and to induce the people to watch the sidewalks in sufficient numbers. It must also encourage those same people to come out of their sanctuaries to participate and get involved in the social activity. No one enjoys sitting on a stoop or looking out a window at an empty street. Almost no one does such a thing. Large numbers of people entertain themselves off and on by watching street activity.

The basic requisite for surveillance is a substantial quantity of stores and other public spaces sprinkled along the sidewalks of a district. There must be enterprises and public places that are used by evenings and night as well as the day. Stores, bars, and restaurants are chief examples that work in several different and complex ways to encourage sidewalk safety. These enterprises give people, both residents and strangers, concrete reasons for using the sidewalks on which these
enterprises face. They draw people along the
sidewalks past places which have no attractions
to public uses in themselves but, which
become traveled and peopled as routes to some­
where else. This influence does not carry
very far geographically in a city district
so enterprises must be frequent if they are
to populate with walkers those other stretches
of street lack public places along their
lengths. Moreover, there should be many
different kinds of enterprises to give people
reasons for criss-crossing paths. Third,
the storekeepers and other small businessmen
are typically strong proponents of peace,
quite, law, and order themselves. They hate
broken windows and holdups, they hate having
potential and even real customers made nervous
about safety. They are great street watchers
and sidewalk guardians if present in suffi­
cient numbers. Fourth, the activity generated
by people on errands or people aiming for food
and drink is itself an attraction to still
other people. The last example is the sight
of people attracts still other people is some­
thing that city planners and city architectural
designers seem to find incomprehensible as they operate on the premise that city people seek the sight of emptiness, obvious order, and quiet. But all the available evidence suggests that this is simply not true.

Another thing to consider is that strangers in an area are not necessarily a hazard. In fact, most are law-abiding citizens too. Strangers become an enormous asset on the street, they provide variety and interest to those who watch the street as an activity, and they provide new blood and money to the area. They also add to the number of effective eyes on the street.

The value of bright street lights for dispirited gray areas rises from the reassurance they offer some people who need to go out on the sidewalk and would like to do so safely, but lacking good lighting would not do so. Light also provides illumination for those people who watch streets to see properly and effectively.
An important element that helps to set the mood in an area of non violence is the established designation of a turf. This element is so successful that it has in recent times seen the same type of technique set up in the newly done areas of suburbs, etc. The technique here is also to designate the turf and fence the other undesirables out. At first the fences and patrolling guards were sufficient to enforce the line but in the past few years the fences have become literal.

A good city street neighborhood achieves a marvel of balance between its people's determination to have essential privacy and their simultaneous wishes for differing degrees of contact, enjoyment, or help from the people around. This balance is largely made up of small, sensitively managed details, practiced and accepted so casually that they are normally taken for granted.

It is true that the streets are a hazzard to
the children that play in them, but what is important to understand here is that the parks and other facilities are much more dangerous. It is true that cars and hard pavement are very in-human to children but the trick here is to find new ways to allow the children to participate in the streets social structure and still be safe from all the elements to include pavement, cars, and the weird people who walk around.

Children in cities need a variety of places in which to play and to learn. They need, among other things, opportunities for all kinds of sports and exercise and development of physical skills, more opportunities which are easily obtained. This is something that they do not now enjoy in most cities. However, at the same time, they need an unspecialized outdoor homebase from which to play, to hang around, and to help formulate their notions of the world. It is this form of unspecialized play that the sidewalks can serve, and that lively city sidewalks promote safely.
When this home base play is transferred to large general play-grounds and parks it is not only provided for unsafely, money is frittered away on paid personnel, equipment, and space which are extremely costly. This same money could be devoted instead to more ice skating ponds and rinks, swimming pools, boat ponds, and other various and specific outdoor and indoor uses. Poor, generalized play eats up substance that could instead be used for good specialized play.

A common recent mistake of some of the newer urban projects is that of trying to provide the children with interior enclaves for them in the centers of building projects. Today many other types of ideas have been tried and they have been complete flops. The trouble with this scheme is that no child of any enterprise or spirit will willingly stay in such a boring place after the formulative years.

Another important element is the need of the
mother to supervise by eye contact the play of the children. If this can be provided for then the mother's mental well being is not so apt to be in jeopardy if she is not in a state of worry and wondering what might be happening to the children.

The street provides a good social structure for discipline of the children while they are at play. The other inhabitants will correct the children if they are misbehaving.

The street also provides for the people who identify with it, a place to constantly make informal contacts, to see friends and neighbors, and visit with people that they may not otherwise be able to come into contact without the social structure of the street. This kind of participation is important in the urban situation for the poor as it begins to allow them to see how other people live. It also helps to distract the people away from their problems, and begin to identify with other people and their life styles.
Sidewalk and street peace of cities is not kept primarily by police, necessary as the police forces are. It is kept primarily by an intricate and almost unconscious network of voluntary controls and standards among the people themselves, and enforced by the people themselves.

A well used city street is apt to be a fairly safe street. It also makes an interesting variety for the interests of the people who depend on the street for their life and even identity.

Districts have to help bring the resources of a city down to where they are needed by street neighborhoods, and they have to help translate the experiences of real life to the ill-impressed people who have preconceived ideas about the poor and have even gone so far to stereotype those who do live in that social structure.

Insecurity can not be solved by spreading the people out more thinly, by trading the characteristics of the cities for the characteristics of
the suburbs. Thinning out a city does not insure safety from crime and fear of crime. This is one of the conclusions that can be drawn within the individual cities, too. Suburbs and these pseudo suburbs of transferred characteristics are ideally suited to rape, muggings, beatings, holdups, and other very serious crimes. This may be the case with areas that were at one time middle class suburbs, and now are occupied by the poor, and now are suffering the woes of a high crime rate. These one time suburbs and subdivisions are actually ideally suited to allowance of these types of crimes. The only real difference being that they were once occupied by the middle class which has been proven that the police usually patrol those areas about seven times more frequently than they do the areas occupied by the poor. Now again the poor have become the vulnerable targets merely because the areas that were once designed for the middle class have been
wrongly appropriated to the poor. The only way to prevent this from happening again in the future is to design good housing and environments for the poor on the basis of their needs and identities. We can no longer allow the poor to be handed down those things sluffed off by we the middle class. The poor have their own styles of life, they have those things which are important to them, and we need to begin to take that into account when we begin looking at where to put the poor.
There are a number of instruments or devices which can add to the interest or common good of an area, and will subtract from the well being if not used. Multi-diversity areas seem to be the districts most capable of handling their problems, and also show a strange ability to up-date themselves. A great deal of evidence now seems to suggest that diversity is an example of one device which plays an important role in renewing, and upgrading the area.

In reverse this implement is an important cause or reason why areas of cities have had some of their problems or they lack diversity in any area. The lack of diversity in an area will allow the area to be dependent upon on single use. When this situation exists then the area is somewhat segmented off or separated from other areas. It is in a state of stagnation. It cannot draw other people from the other areas of a city to their areas because this area lacks the
diversity to create the interest necessary to draw people from other areas. Therefore, the area of interest will be in a state of inward dependence and will only be able to see and feel its own problems. When separation such as this exists then an area can only look and depend on itself. It happens for areas of cities much the same as it happens for the elderly citizens, if they have multiples of things of interest at hand for them to do then, they stay spry and alert for much longer periods than if they become separated or alone, it is at this time that their minds turn inwardly and they go into mental recession known to us as senility. This example is only intended to show how an area of just one interest, use, or diversity will begin to act much the same as the sick, elderly, or even the mentally incompetent. And in a very real sense the area is very incompetent to handle many of its own problems or needs.
It is also usually very boring to see all the same types of buildings within any particular area.

One of the causes for entire area needing some form of renovation at nearly the same time is the fact that most of the buildings were built about the same time. The problem with allowing this to happen is that usually they all have the same basic use, they are all of the same basic style, they are for the same types of inhabitants, and they are in the same state of repair. Neighborhoods that are built during the same time frame, usually change little physically over the years except there is some slow gradual dilapidation and material deterioration which takes many years to show up in any prominent visual or physically evident form. This usually means that most of these buildings must be either removed or remodeled at about the same time, too.

In summary, buildings that are built at approximately the same time will come of age at approximately the same time and therefore will have to be dealt with at the same time.
In the interest of good city planning I should encourage phase development in any and all areas of our urban centers. Not only will it help to prevent those things mentioned above from taking place, but it will also help to inspire livelier communities and neighborhoods. If we were to allow a phase development, the buildings in any particular area will have many different styles, different types of people in both social status and ethnic backgrounds, different uses, and in the long run buildings in different states of repair. If we allow a phasing then because of fads and fashions alone after a lapse of time, the buildings in any particular area will have different styles which will help to alleviate monotony. Phasing will also allow areas to remain open in the case a particular need may arise in any area. Let's say, for example, that an area is built and some spaces are allowed to remain open for a pre-arranged and planned time, then if a need arose for a grocery store within that area it
would have the available space to allow that function to take place. But if it were done much as it is today it would mean removal of some buildings before they are due to be removed which is a very costly process. If these areas remain open it means that the city as it dynamically changes will have the space provided and designed in for this flexibility to occur.

Another problem is that most construction in this country is done for middle income or middle class families usually means that entire areas are developed at the same time for the same basic type of family. The problem comes to light when you consider the fact that most middle class families in this country move on the average of every 5.9 years. This allows an undesirable situation of future potential to exist and that is that they all may be looking and buying new homes at the same time at some future point in time. Many areas of cities have felt such
a mobility in recent years. There are many reasons behind why middle income families have been doing this moving. One reason why this has happened is that as families begin to have a better standard of living and a higher income level, they are making the decision to move to the new peripheral areas, suburbs, and new subdivisions. But income and prosperity is not the only reason, some of the others are: They want more open space for children because they feel that the children can't play safely in the central urban areas. Wanting more space inside and outside the house than they are able to afford in the central city. They want more privacy. They seek more grass, trees, and natural elements as symbols of stability and peace. As they begin having larger incomes, they also begin to want a house which is different from the next man's not simply one of hundreds of identical apartments. They usually end up purchasing one of a group of similar apartments or houses because
they find that they cannot afford the individually designed homes. Wanting to own a house of their own is a common reason given. These are the people who have only rented before and begin to see that they should be putting their money into something that will be theirs someday rather than continuing to pay a landlord. They now begin to feel that ownership protects them from the uncertainties of tenancy, from reliance on others, and from the expenditure of money into someone else's pocket. They would also like to be gaining equity in something of their own. It creates the illusion that the owner and his family have a world of their own, where nobody can touch them, and that they now must no longer depend on anyone else. Most middle-income families either decide not to remodel their home which they already own in the city or they do not consider it a sound investment of buying a used home and undergoing expensive remodeling. Most
also realize that any reconstruction of an older home will also cause them to be penalized by the tax structure. Therefore they consider it an unsound investment to undergo expensive renovation and then end up paying again for the increase in the taxes that will be levied because of the increase value of improvement to the property. They are also wary of unforeseen expenses such as old water heaters breaking down, furnaces going on the blink, etc. They figure that if they are going to spend that kind of money then they may as well have something that is entirely new. This exodus of people from the center of the city is leaving areas either abandoned or to be bought up by the notorious "Slum Lord". Whether these areas are abandoned or bought by the landlords, they begin to deteriorate day by day. This exodus of these families, leaves the buildings and areas in a state of economic squeeze.

Another important point to consider with
respect to the information stated above is
the fact that the area of interest then will
have very little visual difference and there­
fore will be very monotonous, and boring.
The people who are poor have a very serious
situation that is hard to cope with by it­self and it does not need some form of
visual monotony to remind them from day to
day that they are the one in that very bad
situation. It has been a middle class
attitude for some years to put the poor in
their place and let them stay there. If we
are ever to begin to solve some of the
problems of our urban areas then we must
begin to break out of some of these middle
class attitudes, and show some compassion
for those who are not so fortunate.

We should also point out the negative iden­
tity attached to areas mentioned above or
to public housing projects also. By their
very dilapidated situation for slums, and
by their very design for new public housing
projects, they reinforce feelings of self depreciation in their residents, and express a form of helpless isolation. This stigma is a flag that invites exploitation by others, which in the long run continues the occupants downward interest spiral. It creates the feeling of no matter what I do, I can never get out of this situation. They develop the attitude of why try and why should I fix this place up. It must be pointed out that most people in this situation feel that the architects and the establishment provide better places for animals to live and stay.

But there is also another stigma usually attached with bad housing, slums, and public housing projects and that it is customary that the government sponsored housing projects for a variety of reasons seldom are articulated and designed so that they do not stand out and are not recognized as very distinctively different.
residential complexes. It is our contention that this differentiation serves in a negative way to single out the project and its inhabitants as easy hits. The idiosyncratic image of publically assisted housing, coupled with other design features and the social characteristics of the residential population makes such housing a peculiarly vulnerable target of criminal activity. This may help to account for the fact that 10 times more crime takes place and is committed against the people who live in the housing projects for the poor than takes place against any other segment of our society. Almost 23 times more crime is committed against the people in slum districts than they actually commit themselves.

One facet of the negative image is the distinctiveness of building height, project size, materials and amenities. Because of their height and number, most of the buildings are extremely visible. Exterior
materials are often mean and devoid of any touchings of quality.

Areas of cities, especially those that are inhabited by the poor, are in a special situation of having only those people who have basically the same problems and fates. Usually in these situations the problems seem to take on a sense of magnification. It is similar to hearing a singer singing and then joined by another singer singing, usually the phenomena that takes place is an amplification or reinforcement of the sounds. This is in a very real sense exactly what takes place with concerned to the housing of the poor.

Another recognizable shortcoming of public housing is the institutional, vandal proofed interior treatment. This attitude toward interior finishes and furnishings creates an institutional atmosphere, not unlike that achieved in our worst hospitals and prisons. Even though the materials are
in fact stronger, and more resistant to wear, tenants seem to go out of their way to test their resistant capacities. Instead of being provided with an environment in which they can take pride and might desire to make advances to do proper up keep, they are provided with one that begs them to test their ability in tearing it down.

By gentlemen's agreement, public housing must never approach the luxurious in appearance even though it may cost more per square foot. It must retain an institutional image. Unfortunately, this practice not only puts the poor in their place, but also brings their vulnerability to a degree of attention to others. Parallel to this, and much more devastating is the effect of the institutional image as perceived by the project residents themselves. Unable to camouflage their identities, and adopt the attitudes of private apartment dwellers, they sometimes over react and
treat their dwellings as prisoners treat the penal institution in which they are housed. They show no concern for assisting the care, upkeep, and maintenance of the buildings, no inclination toward the decoration of their apartment units with paint or curtains.

Newman's conclusion is that a resident who has resigned himself to not caring about the conditions of his immediate surroundings who has come to accept his ineffectualness in modifying his conditions is not about to interceede, even in his own behalf. They feel they are in a spot that they cannot get out of and, therefore, also feel why try.

We also must understand that the average person, considered to be in a poverty or low income level or situation, only has approximately 6.4 years of education. They most often rely on emotions and primitive actions. One might also consider them on a comparable mental level of learned
information equal to a sixth grader or child. Children of that age has been known to write on walls, etc. They have not learned to respect their immediate environment or belongings.

Signs of the effect that these depressing surroundings have on residents cannot be ignored says G. Newman, a top sociologist, "our interview with tenants have led us to the unmistakeable conclusion that living units are assessed by tenants not only on the basis of the lifestyle they symbolize and purport to offer, but also on the size of the space and the available amenities. Building prototypes, form rowhousing to high rises, symbolize various forms of class status, the small, two story rowhouse unit totaling 1200 sq. ft., with a couple hundred feet taken away by an interior staircase is universally held by tenants to be more desirable than the 1000 sq. ft. apartment in an
elevator building, equipped with more modern conveniences. As with most of American society, low income groups aspire to the lifestyle symbolized by the housing prototype and by the suburban bungalow. They view the rowhouse as more closely resembling the individual family house than the apartment within a communal building. A piece of ground adjacent to a unit, provided for the exclusive use of a family is cherished and defended, regardless of how small. It has long been assessed that the poor aspire for the same types and levels of the good life and the material amenities which follow the social classes, but in my opinion, based on all the information I have gathered, they're aspiration is in image only but they also desire space which provides for their needs.

Another important point to consider is the fact that there are areas that have been allowed to become segmented off from or
segregated away from the rest of the cities districts by the establishment of zone barriers. For example, no area should be allowed to be bounded by another one diversity area. First, all areas of cities should be multiple diversity areas. This means that they should not be just housing areas or just commercial areas alone. They should have multiples of uses in the areas like housing for single families, housing for multiple families, parks, commercial, industrial, warehouse, or any other use. Therefore, they are not dependent on the static situation of depending on one single thing or use. And second, they should not be bounded by another one diversity areas. For example, a housing district should not be allowed to be bounded on its sides by just commercial districts, or warehouses, etc. These types of things create barriers which other people find undesirable to go through to go to any other areas. It seems from all the evidence
that I was able to find, that this actually helps to act as an isolator which segments this area away from any other area. It again then withdraws into itself and can not find the strength to break out. There neighborhoods show a strange inability to update themselves, enliven themselves, repair themselves, or to undergo any form of change themselves. It is in a stagnate stage without any ability to change, it merely continues to deteriorate until some point in time that is must be wiped out and then replaced. But usually what happens again is that the new project has the same characteristics but it will take only forty years for then to show up. This is not a process of solving the problem, infact quite the contrary it is a delaying process and again the colors will show up at some future point in time. It seems from all the evidence that areas should be those of multiple uses and diversities and they should flow together
and through each other. Take for example, if you have four separate areas each of which have a diversity all of their own which is different from the diversity in any of the other areas. Then if you allow these same areas to overlap what you will get in the center is an area that belongs to them all, and it is an area of multiple diversity which has gotten its character from the four separate areas. The diagram of the following page attempts to show this phenomena.

Many of the present zoning codes help to promote this stagnation and isolation by establishing areas zoned for one primary use. The old corner drug store or grocery store has been almost put out of business by the present zoning and taxation systems.

Another important thought should be pointed out with concern to area zoning. Often times, areas of cities are zoned to discourage multi-diversity in areas. What this allows
to happen is another problem which can either an immediate or long range problem, or it allows a situation of future potential to exist that will most likely become an extremely depressed situation through time. I realize that many of these zoning ordinances are based on a need for financial protection of property values, but we also must begin to understand that in the long term it discourages diversity. Its much the same as with concern to environmental conditions we have found that in the short term its much more economical to allow industry to pollute waters and the air as it keeps their overhead down, but in the long run, its much costlier as we have to pay for expensive means to clean up these resources. The same is true of city districts, its much less costly to put only residential together, and commercial in one zone, and warehouses in separate areas, but in the long term they create situations which are far more expensive to handle.
What we instead, should do is begin to create multiples of places where these functions can take place, then they do not become a problem in just a few localized spots, but instead are dispersed or spread over a larger general area. The resulting effect is areas which are multi-diversity and also districts which do not become obstacles or barriers from one area to the next.

There also seems to be a double standard in the allowances of variances between the private segments and the commercial and business sectors. As it now exists variances are almost never given to a private people and their houses in residential districts as it should be, but in the case of a commercial establishment it is almost always granted unless a number of people come forward to protest.

I contend that these variances for the public sector should not be given
LACK OF DIVERSITY CREATES STAGNATION AND MONOTONY.
WHEN AREAS ARE SURROUNDED BY
SINGLE COMPONENTS IT CREATES
BARRIERS WHICH DISCOURAGE PEOPLE FROM FLOWING THROUGH
Areas with different diversities should not be separated but instead flow together creating areas of multiple diversities.
automatically unless a number of people come forward to ask that this particular institution be allowed to locate in that location as it would be a benefit to their neighborhood or area. As it exists now a commercial establishment will almost always get a variance in any area whether that area is a residential district or a commercial area. But in the residential district if a private individual wants a variance he will almost never get it.

This seems to suggest that money can buy anything. It usually allows a commercial establishment to locate in an area whether it is needed in that area or not. Whether a certain commercial firm or enterprise is needed any area should be the only premise by which variances are allowed. Now as it exists today commercial businesses buy property in an area because it is cheap and they locate in that area for the wrong reasons. Under the system that I am suggesting a new commercial shop would
not be allowed to locate unless a number of people who live in that area come forward to support that project on the basis of its merits to the locality.

An architect, Oscar Newman, the director of the New York University Institute of Planning and Housing, who has done an in depth study into sociological aspects of housing and also an in depth study and wrote a book on defensible space. Newman defines the goal of defensible space concepts as designs that returns to the productive use of the residents the public areas beyond the doors of individual apartments: The hallways, lobbies, grounds, and surrounding streets and areas which are now beyond the control of the inhabitants. He lists four elements of physical design that contribute separately or together, to the creation of secure environments. First, territorial definition of space in developments reflecting the areas of influence of the inhabitants.
This works by subdividing the residential environments into zones which adjacent residents easily adopt proprietary attitudes. Second, positioning apartment windows to allow residents to naturally survey the exterior and interior public areas of the living environments. Third, adopting building forms and idioms that avoid the stigma of peculiarity which allows others to perceive the vulnerability and isolation of the poor inhabitants. This also helps to alleviate some of the feeling of the occupants that they are some sort of freaks or even strangely different. It has been proven that the better the occupants feel toward themselves, usually the respect also for the space and feelings toward the world in general increase. Fourth, enhancing safety by locating residential developments in functionally sympathetic urban areas immediately adjacent to activities that do not provide continued threats. Of the four
mentioned elements, some can be incorporated in existing developments through carefully designed modifications. Others, such as location and siting might be impossible to correct, but all, Newman feels, should play major roles in the new project planning. "Defensible space", he writes, "can be made to operate in an evolving hierarchy from level to level in the collective human habitat and to extend from apartment to street. It is a technique applicable to low density rowhouse groupings as well as to developments composed of high rise apartment buildings. The small cluster of apartment units where occupants can be made to extend the realm of their homes and responsibilities. The second common entry and circulation paths within their buildings. The third level is the clustering of buildings which define a project’s grounds and its entry. The final level in the hierarchy occurs when the housing development stakes its claim on the urban streets surrounding the housing development.
Juxtaposition with influences outside or at the periphery of the project grounds may have various effects. Public streets around a project are almost universally identified by the residents as safer than the interior project paths, and walks. Relationships between projects and commercial, park or school facilities need careful weighing, Newman feels. It is necessary to evaluate the adjacent activity in terms of its nature, intended users, its identification with area residents, periods of activity and the frequency of the presence of concerned authorities.

The following general guideline seems to emerge, for low income families with children particularly those on welfare or those suffering pathological disorder, the high rise apartment building is to be strictly avoided. Instead these families should be housed in walk up buildings no higher than three stories, preferably, but absolutely no higher than four stories. Evidence seems to also suggest that the occupants feel that
they have no control or participation in the natural or social environment in high rise structures. It is also interesting to note that the incidences of people diagnosed to suffer from acrophobia is highest among the lower class. They also fear the stigma of gray, dead stairways, elevators, and long hallways as possible areas of potential crime. Infact, studies show that most of these physical parts are actually extensions of the street and therefore, the feeling of an established turf does not exist. And again, they feel the social stigma of easily spotted high rise apartments. Entries, and vertical or horizontal circulation paths should be designed so that as many families as possible share a common lobby. In simplified terms, the problem is getting a person to and from his or her living quarters without fear of an occurrence of crime incidences or harassment. This includes the residents safety and sense of well being on project grounds and in lobbies, elevators, stairs, corridors, and apartments.
One widely accepted tenet is large shared open areas around projects buildings are desirable. On that assumption, every resident could use the spacious areas for recreation and leisure. Open space requirements often have been met by building higher and assembling superblocks, but they too have been disasters. The automobile should be used as another device for physical surveillance of the projects grounds, or at least part of it. The trick here is to provide a balance between the automobile and its movement, and the social circulation or routine. If done, then it naturally supplies the surveillance necessary to help to detour criminal elements. Today, in most new projects the automobile is seen as anathema, and has been banished from the inner spaces. Since main buildings entrances are often designed to face away from the streets, and into the general, open spaces, their use requires a circuitous route from the street, parking or public transportation. The absence of general traffic, makes the center of the project the most forced and feared part of the grounds.
It should be pointed out that emphasis should be placed on low income housing since greater income brings with it the possibility of added security measures. Also the police departments usually have a higher involvement in the patrolling of middle class areas than they do in the lower class areas. The statistics show about 7 times more patrols take place in the middle class areas than in the areas occupied by the poor.

Most public housing allows no amenities and hold the line budgets have no room in the ledger book for fear of its causes. Land use economics produces more and more high rise housing. Long double loaded corridors dictated by elevator grouping economics and combined with fire stair requirements, often provide a criminal with multiple escape routes.

The goal of building more units has overpowered the scrutiny of the means, more units mean less recognition of strangers.
by residents, and less involvement. From less participation comes less feeling of control on the part, or all the project outside the individual's apartment and fewer attempts to cope.

Still another self perpetuating trouble source is the normal criteria for site selection. Often relegated to the most undesirable land by economics and socio-political pressures, projects cannot even begin existence without absorbing adjacent ills. Surrounded by high crime areas, the best aspirations falter.

Enormous hardships are caused by slum clearance; the people whose economic and social circumstances cause the slum, are forced to move, with the result that new slums grow elsewhere. Yet at present, federal grants and subsidies encourage this kind of urban renewal. They must be replaced by rules which create circumstances of gradual improvement inside slums, and which provide belts
or zoned protection against commercial intrusion. The zones which cannot be varianced act as insulation between the slums and the downtown areas. The pressure from business interests to clear the slums is minimized.

Effective neighborhood physical planning for cities should aim at these purposes. First, to foster lively and interesting city and neighborhood streets, both form the physical and sociological standpoint. Second, to make the fabric of these streets as continuous a network as possible throughout a district of potential subcity size and power. Another important part of this is the fact the fabric of the city should be left much as it is and not changed greatly as the people identify with the present structures. Third, the present population of any area should be accommodated but any increase in population should be studied very carefully before adopting that
as a plan. The studies concerning this show that as you begin to increase the population of districts by the design, a corresponding increase of hostility also occurs. They have found that below a 25% increase in population to the present fabric of the neighborhood shows no marked change in hostility, but above 25% the rate of change in hostility increase at an alarming rate. Fourth, to use parks, squares, and public buildings as part of this street fabric, use them to intensify and knit together the fabric’s complexity and multiple uses. They should not be used to island off different uses from each other or to island off subdistricts and neighborhoods. Fifth, emphasize the functional identity of areas large enough to work as districts. Sixth, should maximize the setting for informal contacts. Seventh, for children the physical environment is supposed to aid in learning and formulation of body skills.
Men are increasingly assuming conscious control over the development of their cities. As societies group progressively larger proportions of their populations in urban areas. The construction and reconstruction necessary to supply their elemental wants and needs enters a state requiring critical attention.

In recent years it has been substantially proven that the type of housing occupied influences health, behavior, and attitude, particularly if it is desperately inadequate. This means that housing is so dilapidated or lacks major facilities, such as running water, that it becomes a demeaning environment for humans to occupy. In these terms, in 1946 some 13 million structures were regarded as in this classification, by 1956 that number has risen to 23 million structures, in 1966 the estimate was in the neighborhood of 36 million, and by 1976 the number will have reached approximately
48 million. The problem has reached epidemic proportions. It should also be pointed out that the situation goes beyond merely providing shelter. Conscientious citizens as well as most responsible professionals, find it sufficient the reassurance that every man should have a roof over his head. They now ask with concern whether housing provides adequately for the health, safety, and welfare of its occupants.

In my particular area of study it is evident that there are many symptoms which begin to identify this particular area as a drastically depressed and oppressive area. In this area it suffers from the highest amounts of death rate from all causes, infant death rate, suicide rate, tuberculosis rate, veneral disease rate, mental hospitalization rate, illegitimate birth rate, juvenile delinquency rate, and serious accidents within the dwelling and the immediate exterior areas. This
particular information is not only alarming but it is also a symptom that usually exists in almost every existing slum in the United States. It has long been argued a safe home is an ultimate end in itself for the poor. I content that safety and security, among others, are chief requirements of the lower class in their homes. They must provide safety from both human and nonhuman threats. Among these threats are:

**Nonhuman**

Rats, mice, and other vermin
poisons
fire, burning, and smoke inhalations
freezing and cold
heat exhaustion
poor plumbing
dangerous electrical wiring
trash (to include, broken glass, cans, etc.)
insufficiently protected heights
other aspects of poorly designed or deteriorated structures, (such as thin walls, broken steps, etc.)
costs of dwelling from slum lords.

Human Violence to self, family, neighbors, possessions, and to space
assault
break-ins
fighting and beating
rape
objects thrown or dropped
stealing
verbal hostility, shaming, and exploitation
landlords and caretakers
attractive alternatives that wean oneself or values away from the stable life.

It may be too much to expect that changes of the physical environment can rout all or even many of the human threats from the life of the lower class persons, but we can begin to deal with many of the human and most of the nonhuman threats. They can be controlled by adequately designed housing, and that the average lower class person evaluates his
home environment in terms of the adequacy of the housing unit itself in these terms. It is also important to note that recent information shows that the people do not evaluate their housing in terms of safety and security, but also in terms of space, and available amenities within the structures. This evaluation in no way is discontinued at the physical boundaries of the house, but instead continues into the physical setting of the block and even the neighborhood.

In a study recently released by Lee Rainwater, a top sociologist and urban planner, concerning a number of valuable surveys showed a great deal of valuable information which is listed 1-24 below.

1. Intense, frequent association with a wide range of relatives thrives in areas in which many people have easy physical access to each other, while the same people find that this style of life diminishes
involuntarily in areas of low density.

2. An emphasis on the nuclear family and its joint activities is most congruent with the access of people to each other and to various activities now provided by the typical housing, open space, and land use patterns of the suburbs.

3. Active, traditionally masculine past-times are part of home life only when the environment is structured so as to minimize the impingement of neighbors on each other.

4. Specialized interests which require co-enthusiasts are difficult to satisfy in low density areas. Adaptive behavior, often expressed in terms of kaffec klatching or organizational participation, is essential for those whose lives have previously included other people, and activity but who are suddenly relatively isolated.

5. People with "cosmopolitan" life styles desire more physical separation from
neighbors and place less emphasis on proximity to facilities and services than do people whose interests are "local".

6. Direct access to the outside maximizes control in child raising under conventional parent-child relationships.

7. Self-contained housing units minimize parent fostering of children's inhibitions.

8. Adults, before and after raising children (as well as those who are childless) frequently rate centrality (i.e., access to consumer goods and services) more highly than do families with growing children.

9. The aged find greatest satisfaction in a concentration of like-aged people, particularly when they have "local" life styles and previously lived in noncohesive neighborhoods.

10. Accessibility to lively activity is also beneficial for older people.

11. The percentage of income that people will spend on good quality housing varies primarily
according to their education.

12. People in different socio-economic classes have different conceptions of housing adequacy.

13. Completely random placements of working class residents among middle class neighbors results in the isolation of the former rather than in any intended, positive result.

14. Although current usages and images of the city are restricted by personal resources, no significant differences in the preferred form of homes, neighborhoods, and cities have been shown related to social class differences.

15. National and cultural values frequently transform the type and the use of urban spaces in any place.

16. People who highly value convenience are likely to prefer more mixed land uses and small lot sizes. People who highly value individualism prefer larger lot sizes.

17. People evaluate housing with a different
yardstick, according to the type of housing.

18. People associate private open space with active family pursuits regardless of the size of the space.

19. Housing condition leads directly to social and physical pathologies only when it is desperately inadequate. Marginal improvements in housing condition have been found markedly related to few expected benefits, the most pronounced of which is a shorter duration for children's illnesses.

20. High neighborhood densities seem more related to social pathologies than crowding within dwelling units, but its effect is mediated by personal and cultural factors.

21. High noise levels are related to the incidence of diseases that involve tension.

22. Lack of ability to meet people in a place where contact can become meaningful (such as can now be found in certain types of apartment buildings) is related to an increased incidence of reported medical
problems, possibly reflecting induced introversion.

23. A forced change of residence induces a psychiatric syndrome more direct than most other behavior responses to environment. This is particularly acute among people whose cultural or occupational traits (or both) are different from middle class norms.

24. Spatial proximity, often based on the position and outlook of doors, may determine interaction patterns, but this normally occurs only under conditions of real or perceived homogeneity in the population and where there is a need for mutual aid, which is in many instances caused by population turnover in situations where residents themselves cope with repairs and like problems.

The most sophisticated study in this tradition was conducted in Baltimore by Wilner and his associates. Comparing 300 black families who had just moved from substandard
private housing to new and sanitary public housing, with a like number of families who continued to live in substandard housing. The researchers assessed the social and physical influence of improved quality of housing. They found some mild improvements in the social relations of these people as a result of their moving to better housing. For example, they had better relations with neighbors, and their self esteem rose. But their social pathologies did not appreciably lessen; for example, they did not substantially change their family life or lack of aspiration for upward mobility.

One improvement did ensue. Children's illness were less severe and not as prolonged in the new housing. As a result their school attendance records and their grades improved.

Improvements in the condition of housing, therefore, do not revolutionize the lives of people, particularly when they start with
severe problems that are primarily social in origin. None the less, change in condition may effect particular aspects of health, (i.e. severity of illness), which may have a limited effect on social effectiveness.

Evidence shows that slums do not become slums or ghetto's overnight. I content that cities can begin to identify areas of future problems years in advance. It is interesting to note that the following list shows particular symptoms that are usually existant in slums.

1. death rate from all causes
2. infant death rate
3. suicide rate
4. tuberculosis rate
5. venerial disease rate
6. mental hospitalization rate
7. illegitimate birth rate
8. juvenile delinquency rate
9. imprisonment rate
10. school drop-out rate

I believe that symptoms such as these begin to appear slowly, and continue to develop as the area travels its course of progression to slum condition.
This brings me to the final phase of information concerning the reasons behind why the people who live in the slums do not take care of their spaces. It is interesting to note these people do not take care of certain spaces, but while in other spaces they not only maintain but also improve the quality of the space. We have for years realized that people use spaces at different cycles in their lives much differently according to age. The young married couple first begins life together with only modest needs for space. When they have children, the space requirements change. The children grow needing more space. Increases in income creates a desire for more space. Children leave home and go off to college, to get married, or to set out to make a life of their own which places the family into a situation of not needing so much space. During the elderly years, space requirements return to a desire for modest accommodations. The death in the family of one of the partners creates still another shift in need for space and accommodations. Most people have realized this situation for many years, and they have also understood the implications of modification of space requirements according to
ethnic origin have a different life style. Do they use spaces differently according to ethnic customs. Can people or Architects consciously create an environment that will facilitate achievement of their goals better than some alternative environment? Does an existing space arrangement of buildings and spaces make some forms of human activity more difficult or even impossible, while encouraging others? Or, on the other hand, is what people do purely a matter of custom or volition, completely indifferent to the physical components of their setting? Can they learn to achieve those ends through other means? For example, can public open space accumulate functions traditionally performed on private lots? Do people according to ethnic differences begin to choose certain areas which were originally owned by the middle class and abandoned because of their inherent characteristics of the area? Do these areas offer better performance of their needs than alternately available areas? I realize, that this approach to ethnic variations could tend to reinforce segregation, and solidify certain undesirable family patterns.
Obviously, households with different structures will function differently. Often these differences, I believe, can be related to ethnic or cultural distinctions. These in turn will suggest other variations in living style, giving us, in the end, a number of unique patterns and units. For many years architects and city politicians have tried to dilute any ethnic differences by the use of universal space, but beneficial to my argument is the fact that these trials have really been complete failures. My basic concern in this project is to begin to understand the basic living patterns and needs of the poor from whatever ethnic group that they have sprung.

Over one half of the households in the slums do not consist of the father-mother-children primary family group that we all know and love. Among those that do, an unknown number also includes other relatives.

The relationship between parents and their children varies widely from culture to culture. A full exploration of the topic would involve a far greater knowledge of psychology than I
possess. The results of such a study might be of dubious importance to the designer, or they might not. But psychology concerns itself with the behavior of individuals; the environmental designer must deal with individuals as parts of groups, and therefore is more concerned with the social aspects of behavior. Perhaps I am wasting my time designing an environmental system which does not come to grips with the individual as yet. But as I perceive the role of this study one must first have a volume of knowledge with concern to general patterns before augmenting that information to fit any individual. We all have a certain volume of knowledge concerning typical middle class patterns, and from this storehouse we then begin to augment the information according to the individual who wishes us to design a space for him and his families individual needs and aspirations. In this section I am attempting to discuss the relationship between parents and children, attempting to indicate where patterns may lead to "family break down" or estrangement of parents from their children and where they
may not.

The middle class parents generally see their role as somehow combining the talents of teacher, judge, and policeman, somehow asking for respect as a parent while offering friendship as a peer. They are prone to express their concern for the child's emotional, material, and physical well being.

Among most non-middle class families, who have less access to, or interest in, Dr. Spock (in any of his facets), the role of the parent or of the child is not nearly as general or ambiguous.

Black Family Patterns

This will be an attempt to approximate the general living pattern of a black family which is usually maternally oriented because of the broken home situation that usually occurs for the primary black family. Black society, traced back to slavery does not have a history of strong family ties. This is reflected in the figures for broken homes (one adult with the children). Among black households the figure is somewhere around 69%. Invariably the lone adult is female. The break
down in the black society, initially demanded by slavery, is today still encouraged by a benevolent society which:

--decreases welfare payments if the husband has an income, while keeping the whole family at a barely subsistence level. This forces many black men who work, but have very small incomes, to live away from home for the good of their families.

--The Housing Authority allows un-wed mothers, separated women, divorced females, and widows to live in the projects, except if they are living with the fathers' of their children, or with any other man who might be considered head of the household. (Institutional racism in its totallity)

While the extended family household also exists among black people, it is not as widespread. Black society has elderly parents live with their children, especially in the broken home situation. The mothers' parents, normally the mother who has also come from a broken home situation, moves in to help manage the children in the case the daughter may have to work. Within the black family there has still been a sense of respect for those who are older and therefore a privacy factor comes into play.
At the time the father leaves because of wanting the best for the family and he can not give it to them, and if he were to stay then the welfare payment would be reduced, he makes the choice to go elsewhere to work. In most instances he never returns. On occasion the father will return. The housing space needs to have some flexibility to allow this fluctuation of the male going and coming to be easily modified in space requirements. At the point in time that the man does leave, the mothers space requirements, usually for sleeping is reduced considerably. Because she may spend long hours preparing meals, fixing clothes, and other duties for her children she needs a space which can easily accommodate her working within the living space of the house which will not disturb the other members of the household while at rest. This space according to all studied patterns is included in the living areas of the house or apartment. There also is a need on occasion for her to modify it for more degrees of privacy.

A centralized kitchen is a mandatory constant,
as she needs a central home base from which to supervise the children. Both slavery, agricultural living style that followed it, and city life has encouraged a communal approach to child rearing. The mother is usually forced to work leaving the care of the children to someone else. The father being absent, more often than not means the child acts as a self-supervisor. Therefore, since many family ties do not exist, everyday family participation also does not exist. So, eating is usually done, if there is food, singly, and not as a family group as we the normal average middle class families do.

When the situation arises that there is not a substitute supervisor for watching the black children the teacher at school will either become the educator or the supervisor for at least part of the time. Eventually, for the teacher, both education and supervision become impossible, and the child (adolescent by now) is literally driven from school. The consequences of this, both to the individual and to the society, need not be detailed. I am, obviously,
making a value judgement here that this type
of family, and subsequent social, breakdown is
undesirable.

In the black family, little need for privacy
existing for the children. There does, though,
seen to be an important breakdown in sleeping
areas for the children. The black culture does
seem to allow a degree of privacy and separation
between the male and female children. This
privacy seems to exist between sex, but does not
apply to the individual child, and therefore,
separate dormitory style rooms for each sex seems
exist. But these rooms, most often, are flexible
spaces which lend to the possibility of a large
enough play-sleeping areas to satisfy the social
needs of the children. These communal spaces,
within the home, are usually set up so as to
courage the children to meet their friends there.
This, in itself, could substantially alter the
presently negative way in which the child may now
perceive his home, while reflecting the fact that
his close relationships are generally with peers,
rather than family.
In the black culture, perhaps because they tend to be somewhat matriarchal, but I don't really know, many girls seem to develop a greater demand for privacy. Maybe they see themselves as future heads of households, and this raises their sense of self-esteem and importance. Regardless of the reason, this point must be considered in the design of the units.

Exterior spaces, (outside the living unit), even though it may still be indoor such as stairs and corridors, hallways, etc. are usually regarded as extensions of the community areas whether the living unit is a single family detached unit or one of many apartments. This may begin to help account for the fact that in black homes about 16 times more accidents happen on front, back, and interior stairs, hallways, corridors, elevators, etc., than for any other living group or ethnic culture. It seems as they do not feel it is their responsibility to pick up debris, toys, etc. It is not their space to take care of. Communal life seems to the essence of their way of life. This is part of the reason why the street and its character seem to be extremely important in their life style. Their
neighborhood use patterns, and city use patterns they seem to be a locally based community with not to great of importance on travel to other areas for goods and services. They do on occasion make a short trip to central services but basically this is because they consider the center of town as part of the street fabric.
Indian Pattern

Historically the Indian has been a communally oriented society for centuries. They have always worked and lived to benefit the group rather than the individual. Basically they lived and participated in groups, and even in the placement of their housing they have always tried to maintain a group image. With the teepee they located in small circle according to family ties. Many clusters of these small family groups then made up the village. The chief's tent normally was located somewhere near the middle and directly in front of the main entry to the village. All secondary entrances to the settlement also converged on the chief's tent. Historically they had groups of teepees in the small groups which shared a common central space which had access to the large groups central communal space.

Their entire village right down to the teepee represents an open arrangement with little
emphasis on privacy, although the possibility of naturally secluded spaces is maintained.

Respect for elders has always been a common part of the American Indians life, especially the Blackfoot tribe which is the predominant culture in Great Falls. It is not uncommon to see the elderly living with the Indian family primary group. Some importance has been always given to respect, and privacy of the oldest son, and beyond the age of fourteen or somewhere around the age puberty which is considered to be the age emarcation into manhood or warriorhood. It was and is the age at which self reflectance and meditation, becomes an important part of the Indian sons life. It is at this age that there needs to be some flexibility to allow this change within the household to take place. Parental privacy has never been an important function for the Indian family, even though the father is the undisputed head of the household. With the Indian family all body functions including
sex are part of natural life and therefore
was not something to be closed away from
normal life. Although this is somewhat
changing today it still has not been al­
tered to any significant degree and there­
fore should be accounted for when providing
space for the mother and father within their
space.

Kitchen activities is much different than in
most housing patterns, and surely much dif­
ferent than most of us would conceive. They
are not so much involved in using already
prepared foods, such as opening cans, etc.
taking out a t.v. dinner. Instead, they are
much more involved in basic preparations.
Like grinding, sifting, and straining own
flour, baking break, also many of their
meals are those which involve preparation
to eating cycle. This is much different than
normal middle class dependence on supermarket
integrity and prepared foods.

Group space is important even within the
individual home. It seems that they are very capable of maintenance and care of commons than is true of any other group.

Thesis group seems to have the least amount of aspiration for middle class images, they have for years tried to keep their tribal integrities and images. It seems to be a single group which stressed segregation and not integration. Their biggest demand is that of equal protection and rights.

They have a deep abiding love for all that is natural. A constant love affair with nature. Their identities lie with involvement in and with participation in nature and naturally provided amenities such as sunrises, sunsets, trees, natural spaces, green and open general areas. This may begin to account for the fact that most Indian, every so often, journey back to their reservations to spend lengthy periods of time. They came to middle class white cities, for needs such as school, food, and jobs, etc. Their lands usually are not of
high enough quality for agriculture, their naturally provided foods are gone, such as bison, deer, elk, etc. If it does exist, it's not of sufficient quantity to take care of all those people who live on the reservation.
Poor White

This group is composed of what is known as upper European decendency origins. It basically comes from climate very similar to that of Montana.

This is a group which utilizes many of the cities facilities on a more regular basis than do other living groups. They are much more likely to own a car and other amenities that normally would be associated with the middle classes.

It is in fact very true that the poor white is actually preliminary structural state from which middle class white that we all know have developed. The poor whites actually live very similar to the middle class whites with some very small exceptions.

This group is the least likely to have the elderly live with them. As the extended family situation here presupposes that the children have a life of their own, and therefore must
not be bothered with the elderly. This begins to account for the fact that in recent years we have seen the elderly asking society not to turn their backs on them as they have grown to feel discarded like relics by a prosperous society. This group is the least likely to have large numbers of children because of their trust in middle class medicine and contraceptive measures.

Privacy seems to be regarded as alor more important than is true of other groups. And adult privacy is of the very most importance. It is regarded as almost sacred and is usually allowed for in their living pattern by creating space for them separate from the living areas of the house.

It should be remembered that this group augments its pattern according to amounts of available money and do change their spaces more readily than do the Black and Indian groups. In poor White ethnic groups situation, small individual childrens rooms are given play
spaces separate from the adult living areas. But if you look at lower class situations which show that this is augmented and changed into dormitory style rooms depending on sex. Girls are separate from the boys.

Bathroom functions are regarded with great privacy. Some societies consider body functions as very dirty, and therefore is something not to be viewed and it is therefore always been a very private function. It has become even more private with the advent of the indoor toilet. The wash basin was originally developed by the poor white group, and was originally included in the bathroom for the purpose of cleaning oneself after performance of body functions.

The kitchen tends to be more semi private as social structure dictates. The space here approximate very closely the space normally allocated in the middle class situation. Although, it usually tends to be more in the
nature of a food preparation center rather than a storage facility of already prepared foods. The mother likes her space to readily able to be changed and given the flexibility of closing it off from others to see if wishes to make that choice.

The largest amount of aspiration for that which is considered middle class is found among the poor whites. They too aspire for the open yards, tranquility, peace, and quite normally attributed to middle class areas.

Strong family ties is not uncommon among the poor whites. Therefore, most of the meals a partaken of by the family group as a whole. Much more space then is needed to allow for this function to happen than in any other group.

The poor whites tend to recreate more as a family unit and therefore usually desire more internal space and external space to do this.

They tend to aspirate or dream to give their
children the best possible chances. Wanting their children to have, they have not been able to realize themselves. It is not uncommon to have this group saving everything that they can to send their children to school. And any begin to account for the fact that the poor white children usually tend to have higher levels of education than is found in other situations of groups in the ghetto. This group in the role of neighboring tends to be the group least likely to participate. They tend to be more self centered and independant not wanting to ask for anything from neighbors or friends, and not wanting anyone to ask of anything. They are more dependent on the immediate primary family, and not usually communal in living situations.

The mother in this group tends to concern herself more in the caring for the well being of the family more. So a good deal of her life is spent in taking care of chores around the home. Here also seems to be a good deal
of attention given to supervision of children, either in the home or out of doors while at play. She therefore does not allow others in communal areas to discipline the children. This is considered the immediate family responsibility.

The mental well being of the mother seems to be a characteristic that usually tends to give the family a great deal of problems. The mother in the poor white group tends to suffer more incidences of mental strain, anxiety, and break downs than is true of other groups. Sufferings from nervousness, and drug addiction of household drugs has been a very immediate problem among the poor whites.

Areas such as stairways, elevators, hallways, etc. tend to be considered neutral zones between what is outside the home and inside the spaces of the house. They then depend on some variables, a tendency to share responsibility in the care and upkeep of such places. They
tend to be considered neither private spaces nor community spaces.

This group tends to be able to adjust adequately to many types of spaces, and responds well to apartments, townhouses, and single family dwellings.

They have a tendency toward which is neutral. The street seems to have some importance, but nowhere to the degree of the black family, or even the Italian social group. The same is also true of open areas. But they tend not to enjoy communal space to the degree the Indians do, or to the degree that the middle class whites do. They also tend to seek out private spaces in their interior and exterior environments, and again this tends to be partially limited to most family ties, and not to groups.
BIBLIOGRAPHY
1. Alexander, Christopher. The City As A Mechanism For Sustaining Human Contact.

2. Alexander, Christopher. The Coordination Of The Urban Rule System.


34. Reeb, *Housing the Poor*.


37. Eqvi-Potential Space, Severino

THESIS STATEMENT
An in-depth examination of cause-effect and effect-cause relationships to instigate optimal architectural problem solving devices and design decisions.

SUBJECT STATEMENT
Taking a specific area of deterioration (in a very real sense a slum or ghetto) in the city of Great Falls, Montana, I would attempt a solution by utilization of the information gathered by the study of cause-effect and effect-cause. I would, by this method, try to reverse present trends in that area, and provide adequate, safe, and high quality housing and a healthy community for all who live there.

THESIS DISCUSSION
The city of Great Falls is very similar to many other cities, in that, it too has begun to feel the quakes of modern societies woes. It too has awakened to find that many areas are starting to deteriorate, that some neighborhoods are already slums, that the downtown business district is one of
noncommerce, and that the city center is no longer a functioning institution of Great Falls. The city fathers are finding that they no longer have the finances and revenues to meet the inflated day to day costs of their city. The dilemma, of city officials, is one of trying to provide solutions to all these mountainous problems. In the downtown area a plan for building new parking structures, a space frammed mall, new streets, and an overall face lift is being formulated. Plans and replacements for old, unhealthy, unsafe, and deteriorated areas (slums) are presently on the drawing boards. But in their zeal and good faith they have made and are still making many of the same mistakes that the larger urban centers have made already and are still doing. One of those mistakes is one of treating the symptom and not the disease. The effect of that approach is one of delaying the situation rather than solving it. Instead of providing decent, desirable solutions to the slum situation, they are merely
replacing old slums with new slums.

This is the heart of my thesis, as I wish to do a study into cause and effect relationships so as to define the real problems, reasons, and the real disease. After those things are understood, then by attempting to reverse the pattern to an effect-cause system, I would hope to reverse the direction and present trends of a constantly degrading situation.

**THESIS ADVISORS AND CONSULTANTS**

My primary thesis advisor will be Prof. Bill Semple, and his role will be one of assistance, advise, and a sounding post for all theories, hopes, and expectations. I have talked with him and we have commonly agreed on the things which we will need to insure a proper and high quality student to advisor relationship. He has agreed to provide general to specific information on which his experience, wisdom, and already acquired knowledge. Providing sources for resource material and reading, information
and intelligence. Counseling me as to direction, and possible courses of action, and giving feedback on the progress of the project are other things agreed upon. Providing intermediate listening, and preliminary informal (individual to individual) jury on programming, information gathering, summarizing information, synthesizing the data, preliminary designs, and presentations. Offering suggestions and identifying areas which need improvement. And most important of kicking one humble student in the posterior if he doesn't have it in high gear at all times.

I intend to utilize Dr. George McClure as a consultant on a spectrum of issues, to include, possibilities of structural considerations, identifying resource material that could be used. Mostly he would be utilized in the event that I have general or specific questions.

Another supplementary advisor will be Ifan Payne, again to be used more as a question
answerer in providing information of theory, psychological, technical, environmental, technological, design, and construction.

In the area of landscaping and site considerations, I will be seeing Prof. Evans of the plant and soil science department.

In the sociology department, I will be seeing Dr. Jobbs and Dr. Turreck. I hope to extract from them information, theory, and ways to utilize information with concern to minority, racial, and low income groups.

A professor in the psychology department might be used, but have not been able to contact anyone from that department as yet will do later friday.

**TECHNIQUES OF RESEARCH**

Logging according to the type sources for research and reading to include books, magazine, newspapers, and they will be entered under specific topics according to the kind of information that the
source is about (for example: environment, site, urban, city housing, individual needs, etc.)

Defining specific problems and areas needed to be researched.

Entering summaries, statements, statistics, quotes, and general information into a compiling log.

Synthesizing information into a logical useful form and drawing conclusions, extracting the heart of the material, and rewriting it into a personal paper that others can read and understand.

Identify the specific sources that were utilized.

Enter information into the program.

REQUIREMENTS FOR FINAL PRESENTATION
I will attempt to do the largest volume of work that I am capable of doing during the specified time, to include a planning study and design solutions. The presentation
might consist of sections, elevations, plans, site plans, photographs, models, perspectives, diagrams, maps, structural analysis, and mechanical components. Any additional material that I may decide to do or discover during the course of the two quarters.

**FIRST QUARTER PROGRESS**

Completion of preliminary work that might include research, planning, diagrams, other area considerations, information concerning the people, maps, and beginning ideas in design.