OR THERE MUST BE MORE TO ARCHITECTURE

by

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thesis submitted to the graduate faculty of the Virginia Polytechnic Institute and State University in partial fulfillment of the requirements for the degree of

MASTER OF ARCHITECTURE

in

architecture & environmental design

approved

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ABSTRACT

This is a study of a mixed-use project on Pennsylvania Avenue in Washington, D.C. The city of Washington has a unique sense of spaciousness and visual coherence as a result of the plan established for the city by L'Enfant. The 20th Century with the advent of the automobile and highrise construction techniques, has changed the conception of Washington from that envisioned by L'Enfant. The overlapping of radial and gridiron street systems has also created some conflicts within the city. During President Kennedy's administration the government undertook the redevelopment of Pennsylvania Avenue. The goals and objectives of the Pennsylvania Avenue Development Corporation have influenced the program that was established for this project. The second major factor behind this project is the desire to create a building flexible enough to accept change gracefully. In an urban context the ability to provide for "choice, change and growth" allows a building to adapt to the inevitable transformations which occur around it.
INRODUCTION

In order to make any real contribution, Architects have to use everything they influence or create to support the people in the struggle against alienation from their surroundings, from each other, and from themselves. In his book, The Sane Society, Erich Fromm discusses certain human needs which he feels are as important as man's physical needs. One of these needs is a sense of identity. "Because he is not lived, but lives, because he has lost the original unity with nature, has to make decisions, is aware of himself and of his neighbor as different persons, he must be able to sense himself as the subject of his actions... The problem of the sense of identity is not, as it is usually understood, merely a philosophical problem, or a problem only concerning our mind and thought. The need to feel a sense of identity stems from the very condition of human existence, and it is the source of the most intense strivings."  

The power to control and influence one's environment allows one to take possession of it. Therefore, one can identify with one's surroundings by no longer being a passive inhabitant. "Participatory design has been developed throughout the years, its operational terms defined and the conviction that environmental culture must grow out of the reawakened sensibilities of its inhabitants that has always remained unchanged."  

This project attempts to explore the needs of the user. Often an architect will make a design decision intending objects or spaces to be used in a very specific way. However, this desire on the architect's part may never become a reality for the users. It is important that a building is able to adapt to the users needs. Thus, an architect must provide a framework that allows for change but is strong enough to direct the development. Philippe Boudon expressed the importance of this idea in a discussion on the 'Quartiers Moderns Fruges': "...the modifications carried out by the occupants constitute a positive and not a negative consequence of Le Corbusier's original conception. Pessac could only be regarded as a failure if it had failed to satisfy the needs of the occupants. In point of fact, however, if not only allowed the occupants sufficient latitude to satisfy their needs, by doing so it also helped them to realize what those needs were... Thus, the rules of the game framed by Le Corbusier proved extremely fertile."
for today's streetscape has as much to do with the objects that inhabit or pass through or above—cars, buses, taxis, delivery vans, telephone boxes, parking meters, airliners, and helicopters—as with the objects that define the street, i.e. the buildings themselves.
The city of Washington has a strong historical background. In 1778, the delegates of the Continental Congress realized the importance of establishing a capital which would be the permanent home of the new government of the United States of America. Major Pierre Charles L'Enfant was selected to design the city of Washington. He blended two major concepts of city design—a system of axial and transverse relationships, best typified by the planning of Versailles, and a more utilitarian gridiron system. The topography of the city and the views from one topographic feature to another were also factors which influenced L'Enfant's design. A sense of horizontality and spaciousness were the result of this design.

During the 1920's and 1930's with the construction of the Federal Triangle several of L'Enfant's basic premises were affected. "Official Washington was to become, under the plan, a city of buildings within parks... Finally, the Federal Triangle separated the government from the city of Washington. Pennsylvania Avenue became a barrier between the massive government buildings on the south and the edge of the city's downtown area on the north. By the 1950's the Avenue had lost its prominence in the economic and social life of the city."

During the 1960's the Pennsylvania Avenue Plan was developed. It has evolved over the years into the plan which has been implemented today. Some of the objectives of this plan are to:

- reinforce the Avenue's role as a link between the White House and the Capitol
- bridge the Federal core on the south with the city's downtown on the north
- provide a mixture of commercial and cultural activities to stimulate street life
- bring residents back to the Avenue which will keep the area alive after the workday is over and also will support a greater variety of commercial activities.
THE SITE

The site is located on Pennsylvania Avenue between 6th and 7th Streets. This triangular site contains two historically significant buildings: the National Bank of Washington and the Central National Bank. Both of these buildings have been renovated in recent years. The former, is "a late nineteenth century bank building of eclectic design... illustrating on a modest scale many of the best qualities of the so-called Richardsonian style." The Central National Bank, presently being renovated by Sears Roebuck and Co for office space, is "a six-story brownstone structure erected in 1888 with two round turrets capped by conical roofs." C Street which at one time ran through the site, has been closed. Indiana Avenue, which runs along the north side of the site, has been designated to become a pedestrian street. A metro station and a bus stop are located at the top of the site on Market Square (along 7th Street).
The construction of the Federal Triangle resulted in the separation of the federal government from the city of Washington. A mixed-use development on this presently under-utilized land would encourage economic growth in the area. In the past two decades there has been an upsurge in the demand for office space in Washington. The growth in small, relatively high income households has resulted in a demand for housing. Residences would help to keep the area alive after the workday is over and would encourage economic growth. Therefore, a mixed-use development on this site would help to bridge the gap between the government office buildings on Pennsylvania Avenue and the commercial district of downtown Washington.
The design did not spring in a flash...”
Le Corbusier
THE PROJECT

"Poor old Pennsylvania Avenue . . . vast walls of stone weigh down one side of the Avenue, while parking lots cut gaps in the other . . . ." Many of the decisions made in this project involved an attempt to address the problems specific to Pennsylvania Avenue. The project is a light, skeletal structure in contrast to the massive, stone buildings which exist along Pennsylvania Avenue. Thus, it begins to provide a transition between the heavy, rather ominous government buildings and the smaller buildings divided by an enclosed gallery. The gallery is located along the axis where C Street used to run; this allows one to walk through the building from Judiciary Square (which is the center of the court system of the District of Columbia) to Pennsylvania Avenue and to the Metro station located at the other end of the site.

The skeletal structure also allows the building to change as the needs of the city change. The bottom sixty feet of the two halves of the building are divided into forty feet bays adapted to commercial use. Access to the various bays is achieved on the street level through two interior courts and the gallery. These courts are designed to provide space for kiosks, vendors, and other temporary, small scale structures. The street level is designed to be an open market similar to Les Halles in Paris, Harrod's Food Hall in London, and Faneuil Hall in Boston. On the north side of the building the commercial areas could begin to spill out of the building onto the pedestrian mall. The upper levels of commercial space are designed for office space and other retail functions which people go to intentionally.

Three levels of circular circulation exist on each side of the building. They provide access to the commercial bays located above the street level. The project has three givens: the structural system, the horizontal and vertical circulation systems and the mechanical shafts. The height of the commercial space may vary within the structural system; space is rented in terms of three dimensions (height, width, and length) instead of the traditional two (width and length). The variable height allows for different types of spaces to be created. For example, a retailer may build a high central core with smaller mezzanines around it or a large corporation may create open areas for lobbies and displays with smaller office levels around the sides. However, access to a space is held constant by the circulation system and the mechanical system.
Typical Office Floor

First Floor of Housing
A variety of structural configurations were explored in an attempt to find one which allowed for more than the traditional forty feet office bay. A secondary column was introduced into the center of the traditional square bay, thus one is able to build triangular entrances or window displays, or rotated squares may be developed overlapping two bays. A restaurant may have an outside terrace looking over Pennsylvania Avenue or a retailer may have a grand entrance with large display windows.

The housing is located on the top four floors of the building. The concept of flexibility is extended to these floors. The forty square feet bays are divided into two twenty feet wide by forty feet deep bays, each containing two apartments (the apartments are two stories high). The givens for each apartment are the sizes of the bays and the mechanical cores. All of the bays are twenty feet wide, but some may be longer than forty feet, or an apartment may extend into another bay. The mechanical cores incorporate the kitchens, bathrooms and stairs. Two fire walls run the length (forty feet) of the apartments, however, the mechanical core (which is forty feet by twelve feet) can be placed at any depth within the bay. The depth of the rooms may vary allowing space for an outside terrace, a wider entrance hall, or a variety of bedrooms (from one to four). Each apartment may vary in terms of the proportion of outside to inside space. The amount of inside space may change as a family becomes larger or as residents change. A set of prefabricated parts would allow for the moving of walls and the addition of rooms. The system is based on 32" by 3 floor panels.

Additional housing units may be added on top of the existing units by extending the structure. The present housing units could easily be removed to provide additional commercial space, demonstrating the buildings ability to change and grow with Washington.
Gallery
CONCLUSION

A thesis is a project to learn from. It is not a building. The completion of a thesis represents the completion of one stage of development. Each student will take with them a set of ideas, values or theories which will hopefully grow and change throughout their lives.

At the time this project was started my ideas were not very clear or well defined. However, certain values and attitudes I have are clearer. The importance of the site and the needs of the community can not be ignored. A building must deal with the reality in which it exist. A concern for the occupants is also very important. The individual users will become co-designers whether or not this is the architect's intent. Therefore, the architect must accept this and attempt to direct the users in a way that will enrich the building.

Behind every piece of architecture there must be a thought which has been explored and developed to its limits. "Clear statement is essential in a work of art . . . If the works of nature live, and if the creations of calculation move, and produce activity in us, it is because they are both animated by a unity of intention which is responsible for them." Or there must be more to architecture than just a building.
FOOTNOTES

7 Ibid. p. VI.
8 HABS DC-223.
10 Spiergen, On the Art of Designing Cities: Selected Essays of Elbert Peets, p. 71
"For, as the pharmacist himself pointed out, he never allowed his philosophical principles to stifle his artistic sensitivity; in him the thinker lived side by side with the man of taste."

Gustave Flaubert

Madame Bovary
The vita has been removed from the scanned document
ACKNOWLEDGEMENTS

One of the most insightful statements made to me this year pointed out the fact that a thesis is a project to learn from and not a building. I would like to thank [name] and [name] who taught me so much and gave me so much encouragement.

And [name] for her floor.