AN AXIS, A TERMINATION, A HOTEL, A GATEWAY

by
Thomas Edwin Duke

Thesis submitted to the Faculty of the
Virginia Polytechnic Institute and State University
in partial fulfillment of the requirements for the degree of

MASTER
in
ARCHITECTURE

Approved:

Hans Rott, Chair

Donald Sunshine

May, 1987
Blacksburg, Virginia
acknowledgements

I wish to express my sincere appreciation to the Jacksonville Chamber of Commerce and Downtown Development Authority for their help in supplying useful programs, maps, photos, and information.

A special thanks to my thesis committee for all of their input and patience, especially under such extenuating circumstances; for demanding my best at times when I had succumbed to mediocrity.

To my parents, I am indebted for their unceasing belief in me and their many financial "rescues".

To my wife, for her continual patience, encouragement, and sacrifice throughout the past three years. It is a wonderful thing in life when respect and admiration for someone becomes something more.

For
# Table of Contents

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>i</td>
<td>Title Page</td>
</tr>
<tr>
<td>ii</td>
<td>Acknowledgements</td>
</tr>
<tr>
<td>iii</td>
<td>Table of Contents</td>
</tr>
<tr>
<td>1.</td>
<td>Introduction</td>
</tr>
<tr>
<td>2.</td>
<td>The City</td>
</tr>
<tr>
<td>4.</td>
<td>The Site</td>
</tr>
<tr>
<td>6.</td>
<td>An Axis</td>
</tr>
<tr>
<td>7.</td>
<td>A Termination</td>
</tr>
<tr>
<td>13.</td>
<td>A Hotel</td>
</tr>
<tr>
<td>27.</td>
<td>A Gateway</td>
</tr>
<tr>
<td>28.</td>
<td>Abstract</td>
</tr>
<tr>
<td>29.</td>
<td>Bibliography</td>
</tr>
<tr>
<td>30.</td>
<td>Vita</td>
</tr>
</tbody>
</table>
"Water acts as the vehicle to propel chemicals to the leaves, and in turn it evaporates into the air. The point of change from water to vapor is the place where flowers and fruit develop.

So in cities, the points of connection between systems should be places of special emphasis and design enrichment."

-Edmund N. Bacon

introduction

This thesis began as the genesis of an urban place. It took, as a precondition, a site where a convention center was proposed and attempted to give back to the city something more than a simple functional arrangement of rooms. The program for a convention center was kept and expounded upon in order to generate the types of activities and spaces required in an urban setting. It developed into a refinement of one of those components.

This thesis has been designed in two parts - the site on an urban scale, and a building within that scheme. Several scales were investigated - the city in relation to the state; the site in relation to the city; a building in relation to its site; and finally, a building in and of itself.

The following pages are a product of those investigations.
the city

Located in the northeast corner of Florida, Jacksonville evolved out of a settlement on the north bank of the St. Johns River in 1822. Being a river city and surrounded by forest, its first major industry was exporting—primarily lumber and timber products. Its natural growth occurred along the banks of the river. The organization of the town became a linear grid with an east-west orientation. Throughout the city's metamorphosis, its central business district has remained organized along this now somewhat obscure, linear grid.

Since Jacksonville stretched across the St. Johns River, it has sprawled radially to become the most expansive in the nation at 840 square miles with a population of nearly 625,000. Throughout this expansion, it has remained a relatively low-profile city physically, with many suburban communities structured on common automobile strip developments, shopping centers, and office parks. Its main economic blood comes from the banking and insurance industries, its nearby naval base, and shipping. Its port is now one of the busiest in the southeast.
Jacksonville is dissected by Interstate 95 and is the first major city in Florida encountered by tourists traveling south along this route. This six-lane expressway becomes the central transportation artery of the city. Interstate 10 terminates into Interstate 95, connecting Jacksonville to the Florida panhandle and states beyond. Visitors to the city would approach from one of these two interstates.

In the last decade, Jacksonville has increased from zero growth in population and jobs to being the tenth fastest growing metropolitan in the nation. With this growth, the city found itself, in the early 1980's, facing the dilemma of having virtually no urban pedestrian spaces, other than a maze of sidewalks and a city park rarely used. There were no unifying elements tying the city together on an urban scale. There was nothing special about its downtown, adding character, or giving it a sense of place. Its streets had become indifferent to the pedestrian. Prime property along the St. Johns River had been monopolized by government buildings, parking lots, and heavy industry, making it uninviting to the public.

Since then, several projects are underway, or have been completed, in an attempt to better utilize the waterfront - a 1.1 mile boardwalk along the river's south bank, a festival marketplace on the north bank, and a metropolitan park east of downtown. The city still lacks, however, a unifying element to tie these activities together.
the site

The site is located in the western sector of downtown, ten blocks west of main street. Currently it is disconnected from the downtown core area in a dilapidated part of town surrounded by vacant lots, empty buildings, closed warehouses, and old truck yards.

Containing approximately 20 acres, the site is basically a long rectangle, 1600 feet long and 580 feet wide, with an east-west orientation. It is bound by Bay St. on the north and Park St. on the east. Its southern boundary is a convex curve running parallel to the Florida East Coast Railroad's main line tracks. A small creek runs adjacent to the tracks, physically separating the site from a low income neighborhood. The western edge of the site borders the Interstate 95 viaduct.
At the eastern end of the site, facing downtown, sits one of Jacksonville's most significant and highly visible historic landmarks—the old Jacksonville Terminal Building. Built in 1919, it was vacated in 1974 and placed on the National Register of Historical Places. The building, a neo-classic revival of the Baths of Caracalla, was built of granite and limestone and remains in good condition. The old Post Office Building is located on the north central edge of the site and has, likewise, been vacated.

The balance of the site contains the debris of railroad tracks and passenger platforms. The only vegetation is bush and a few, scattered palm trees.
an axis

Jacksonville needed a focal element to give some sense of order and organization to its rapid growth and development.

Water St. was chosen to become the urban link between downtown and the site. Currently, a two-lane road with a bend, it would be straightened and widened to a four-lane, landscaped boulevard connecting the front of the Jacksonville Terminal to the Civic Auditorium, art museum, and Riverfront Festival. This would form a high-image corridor linking the terminal to the cultural center of downtown. This in turn would establish a format for new development to occur.

In a historical sense, this axis would re-establish the old linear grid as a dominant, organizing force of the downtown business district; something which was lost as the city grew.
a termination

The terminating elements of an axis must be strong enough to both send and receive its visual thrust. The symmetrical Jacksonville Terminal, with Water St. opened up, would be seen from the core of downtown. The importance of this location being a terminus dictated that something special occur on the site.

My response to this problem was to bisect the terminal with the Water St. axis and extend it through the site. This was in turn bisected with a secondary axis to create an urban square; an outdoor public space providing a forum for outdoor eating, sidewalk cafes, entertainers and street musicians, food vendors, kiosks, and other small-scale structures. This type of urban space is virtually absent in the downtown area.

An Automated Skyway Express (ASE), a mass transit system similar to the one in Miami, is being planned for Jacksonville. On this pretense, an ASE station was connected to the western side of the terminal, in order to restore the spirit of the old train terminal as a transportation hub. Being the main station, this would link outlying communities to the downtown core area, literally tying the city together. Once again, the old terminal would be bustling with activity, serving as a grand lobby for a new type of train. Restaurants and ASE offices occur in its wings.

A skylit galleria 50 feet wide and four levels high runs from the tram station to the edge of the square. Retail space flanks both sides, creating a natural draw from the station to the square. Office space is mixed in on the upper two levels along Bay St. with parking provided below the plaza level.
The galleria originally had picked up on the other side of the square and extended to the lobby of a luxury hotel, which terminates the axis. After building a model, it was decided to delete the galleria west of the square and extend this space to the base of the hotel, creating a grand "European Piazza" or forecourt.

This, however, created such a volume of space and vast amount of pavement that its sheer size would become overbearing and intimidating to the pedestrian. In order to bring the scale back down to a pedestrian level and maintain the openness desired, Venturi's concept for Copley Square in Boston was used; a "non-piazza, filling up the space to define the space". A grid of large and small trees with stepped up platforms of grass accommodates the individual, rather than the masses, who can comfortably walk through the maze and sit along its "streets". A stream trickles through the grid from a fountain at the base of the hotel to the edge of the square, adding a soothing background noise to the area.

**SITE PLAN**

| A. | Convention Center Hotel |
| B. | Service Court |
| C. | Fore-Plaza |
| D. | Old Post Office, Restaurants |
| E. | Office |
| F. | Exhibition Space |
| G. | Meeting Rooms |
| H. | Open Plaza |
| I. | Bus Stop |
| J. | New Railroad Terminal |
| K. | Retail |
| L. | New ASE Station |
| M. | Old Jacksonville Terminal |
The convention center with meeting rooms and two large exhibition halls, form the massing along the southern edge of this urban space. The old Post Office building directly across the grove of trees contains a number of restaurants and eating establishments, encouraging usage of this space as a path, as well as a destination.

A bus stop and passenger drop-off occur on the minor axis at Bay St. Directly opposite, on the extreme southern border of the site, is the new train station. In order to allow participation in the excitement of the whole train experience, the waiting room is brought out over the tracks, affording views of incoming and outgoing trains on three sides. Service elements, as well as retail space, occur along the minor axis.
"Every condition contains the seeds for a response - the search is to find the response inherent in the solution."

- M. Botta
MODEL STUDIES
a hotel

A hotel was decided to terminate the axis on the site. It was chosen for two reasons: (1) for its verticality and mass, and (2) the survival of any urban space is tied directly to the activity and interaction of people using that space. A hotel would serve to continually bring life into the plaza day and night.

In "Architecture: Form, Space, and Order", Francis Ching writes that a termination can be achieved by "a vertical, linear element; a vertical plane, symmetrical in nature with an open forecourt or space in front; by a well-defined, centralized space; or a gateway through which to pass or view". A combination of these elements were chosen as a concept for a building form.

In its purest essence, the building is a "wall" made up of rooms. Piercing the wall is an aperture, creating a space through which to view the city. Originally, the aperture was one space, centered in the building, 50 feet wide and four stories high. Primarily, it was to be a social space.
As the building form evolved to accommodate vertical circulation, the aperture changed in scale. The two elevator banks were pulled together, and the entire central core of the hotel became a public space. Every two floors now share a common floor lobby, a more intimate space for smaller gatherings of people. Each floor now has its own aperture, framing the skyline and river to the east. This two-level space, in turn, spills out onto a terrace carved into the western facade, overlooking Interstate 95 and the landscape beyond.
In response to the road, the building changes. Its edge becomes a curve; its form acknowledges the road. To accentuate its form, the curve limits itself to the central core area, projecting out from the building's plane.

A typical floor is organized as a double loaded corridor. The triangular fire exits are pulled away from the building to terminate the corridor in a pool of natural light. Suites occur at each end, as well as either side of the floor lobby. Two-level luxury suites open out onto the public terrace on the building's west side. All of the guest rooms have their own terrace with a four foot square opening on one side and perforated metal railing on the other. This offers a space to relax after the day is over and enjoy the city-scape on a more personal level.
TYPICAL FLOOR

a. Terrace
b. 2-Story Floor Lobby
c. Guest Elevators
d. 2-Story Guest Suite
e. Storage
f. Maid Service
g. Ice Room
h. Suite
i. Typical Guest Room
The "wall" was placed upon a platform to distinguish itself as a terminus. Within this "platform", the larger scale meeting rooms occur: the ballroom and banquet rooms. They are surrounded by smaller conference and meeting rooms on ground level and administrative offices and meeting rooms on the second level. The southern ballroom opens up into a grand hallway, which in turn opens up into a confined garden space.

On the western wall, skylights allow natural light to penetrate the space below. The kitchen serves both ballrooms from the central space and is serviced from below through a two-level parking garage. The two ballrooms share a common prefunction lobby which is also contained in this central space.

Registration, the Main Lobby, and check-out occur on the second level. One enters up a ramp from the Porte-cochere on an askewed grid, 7 degrees off axis. The connection to the convention center is made from this level through a trussed walkway. This walkway also serves to enclose the garden space on its north side and spatially separates it from the rest of the plaza. The lobby empties out to an elevated platform which steps down to the grove of trees. The fountain, at its base, flows through the trees symbolic of the hotel giving life to the plaza. Parking for the hotel is provided on site as well as below ground level.
MAIN LEVEL

a. Porte-cochere  g. Vault  m. Conference  s. Service Elevators
b. Front Desk  h. Service Elevators  n. Accounting  t. Room Elevators
c. General Administration  i. Newsstand  o. Sales  u. Plaza Entrance
d. Main Lobby  j. Shoe Shine  p. Food & Beverage  v. Garden
e. Check-Out, Registration  k. General manager  q. Administration  w. Bridge to Convention
f. Counting Room  l. Public Relations Manager  r. Meeting Rooms  x. Upper Ballroom/
                                Banquet Hall
BALLROOM LEVEL

a. Ballroom/
   Banquet Hall
b. Kitchen
c. Food Preparation
d. Ballroom Lobby
e. Ballroom Foyer
f. Checkroom
g. Function Room
h. Meeting Room
i. Grand Hall
j. Garden
A variety of structural configurations were explored in an attempt to find one which allowed the transfer of loads from the smaller spaces above to the larger ones below. The solution was to use a 10'-0" deep Veerendale truss. It allowed structurally to transfer the loads, and spatially, to accommodate all of the mechanical space requirements. All of the "back of house" service related activities occur on this level such as maid service, laundry, the employee lounge and cafeteria. A band of vertical sunscreening elements occur on the building's exterior, creating a pattern of sunlight and shadows at the place where the wall meets the platform.
The top level of the hotel contains a restaurant and health club with a lounge and terrace in the center. The service elements, the kitchen and shower rooms, are grouped off of the central space maximizing the premium space around the perimeter.

On the east side of the hotel, the elevator banks are pulled away from the building and given windows, so glimpses of the city can be caught as one ascends to his floor. This seemed to be the best compromise between the uneasy feeling or phobia many people develop from riding in a "glass elevator" and stepping into a little room, unable to experience any sort of vertical circulation. At the top, the elevator banks extend through the building to the roof terrace on the west side. A skylight caps them off and adds to the exchange between the east and west facade.
"Architecture does not begin when one places one stone upon another... It begins when one places one stone upon the ground... Between architecture and environment, a real exchange takes place, which is reciprocal and continuous. I think that the quality of any architectural endeavor directly hinges upon the intensity of this exchange."

- M. Botta

---

**ROOF LEVEL**

- a. Terrace
- b. Lounge
- c. Restaurant
- d. Kitchen
- e. Health Club
- f. Swimming Pool
- g. Showers/Sauna
NORTH ELEVATION
Previously, cities were formed around the idea of defending themselves. Its boundaries were clear. One would enter the city through a gateway - a conventional symbol of welcome, of civic dignity and of power, as in the forums of ancient Rome. Today, the road, rather than defense, has become that force. More often than not, the interstates and freeways shape the city. County lines and city limits deal more with zoning and annexing. The physical limits of a city are often obscure.

With the site’s proximate location to Interstate 95, the hotel is highly visible. It sits at that psychological location where one realizes that he is no longer approaching the city, but has entered its boundaries. It virtually becomes a colossal gateway standing as guardian to the western sector of downtown, overshadowing the genesis of a western node in a high-image corridor, linking the interstate with the downtown core and riverfront.

With the new access planned from Interstate 95, it provides a well-pronounced entrance into downtown Jacksonville, something the city desperately needs.
AN AXIS, A TERMINATION, A HOTEL, A GATEWAY

by Thomas E. Duke

(ABSTRACT)

Technology has advanced to such degrees, yet the quality of architectural spaces has not. Man has become like a satellite - not having contact with the planet. We need to recover the act of living, the act of inhabiting our cities.

Good architecture allows for and creates an interaction between man and his environment; built or natural. The quality of his architecture depends upon the intensity of that exchange.

This thesis looks at an exchange set up between site and city; and between building and site.
bibliography


The vita has been removed from the scanned document