ARCHITECTURAL THESIS PROJECT FOR THE DESIGN OF A CENTRAL CITY SHOPPING CENTER IN WEST LAFAYETTE, INDIANA
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This book is a record of an architectural thesis project done at Ball State University by Ron Cobb during the school year 1978-79. The project involved the programming and design of a 212,000 square foot central city shopping center, Riverfront Plaza, on the 'levee' in W. Lafayette, Indiana. Perhaps what makes Riverfront Plaza most unique as a problem is the fact that it involves building in the central portion of the city, adjacent to an existing department store and strip shopping center; thereby reinforcing their retail potential, rather than competing with them from the city's outskirts.

The initial portions of this book include a presentation of the problem, the final solution, an analysis of the solution, and a review of the thesis experience. The appendices then contain records of the work completed in stages leading to the final solution, including a facility program which provides a more complete statement of the problem.
ACKNOWLEDGEMENTS

I would like to thank my studio critic, Prof. Robert A. Fisher, for helping me keep straight which issues were critical in the development of the solution.

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I would like to thank Jack Nichols, owner of Levee Plaza, for providing me with a copy of the 'Choices for Development' study which was most helpful in the preparation of the facility program.

Last but not least, I would like to thank my cat, Koochako San, for providing emotional support throughout the year. May you live to be 100!
briefly put, Riverfront Plaza is a project aimed at revitalizing the central city in the greater Lafayette area. As has been the case with many cities in the past decade, Lafayette's urban core has experienced a loss of vitality due to the increasing appeal of shopping on the city's periphery. The construction of Tippecanoe Mall on the south-east side of the city in the early 70's, plus the development of 'the strip' along US 52 bypass have taxed the effectiveness of the central retail core. While some revitalization work has been done in downtown Lafayette, in the form of historic building restoration and urban design strategies, just across the Wabash on the 'levee' in W Lafayette is an area with a great deal of potential for furthering that revitalization effort. Currently existing on the site is a small city park on the river bank flanked by a sea of asphalt belonging to Sears department store further to the west. Also, to the north is a strip shopping center called 'Levee Plaza' which is basically a defunct discount store now divided up into a series of smaller shops. Between Sears and Levee Plaza is Brown St. which at one time was the main access across the river to Lafayette; but now serves merely as an access road for Sears, Levee Plaza, and a few small businesses, the bridge having been torn down several years ago. It was my intention to approach this project by acknowledging the fact that Brown St. no longer served an important function, and that this meant a retail link could now be built joining Sears and
Levee Plaza into a central city shopping center development. Upon investigating the problem further, it soon became apparent that there were several critical issues to be dealt with in the solution to this project. One of these issues was the provision of adequate access to the site, both pedestrian and vehicular. Another critical issue was supplying adequate parking for the development on a site with reasonably definitive boundaries. A third critical issue involved the method which the new construction joined the existing buildings; and a fourth issue was that of the building's relationship to the river which was to stress its natural beauty and meaning as a recreational node for the community.
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-INTRODUCTION-

The design solution for Riverfront Plaza is to a large extent a product of the dynamic interactions of the project's critical issues, those being: 1) Adequate access to and from the site for both pedestrians and automobiles, 2) A return of emphasis to the riverfront as a recreational node, 3) Resolution of site restraints with respect to provision of adequate parking area, and 4) The method by which the new construction related to the old.

Many levee area merchants feel that site accessibility is a key component to the future success of the levee area. For this reason, very early in the design process a redesigned interchange, off US 231 to the north of the site, was adopted. This redesigned system allows traffic from W. Lafayette to exit and enter the levee area, while previously only traffic from the east could do so. The interrelationship of ramp placement to riverfront vistas was capitalized on by locating the exit ramps and new access roads towards the riverfront.

Another aspect of accessibility is that of pedestrian accessibility to the site. Typically the levee has been an automobile oriented environment. However, only a few blocks to the west is Purdue University with a student body of nearly 30,000; many of whom depend entirely on their legs for their transportation. For this reason the west end of Brown St. has been converted into a pedestrian mall, and an attempt is made to form a link with the riverfront.
through the center of the site. This link through the site center creates a new nodal point on the riverfront from which riverfront activities can be based. It is for this reason that the activities oriented functions of the project such as restaurants and nightclubs, are located at the east end of the building, along with a civic space which looks out onto and serves the park. It is hoped that such an arrangement will add meaning to the river as a recreational symbol and geographic marker of the area.

The supply of adequate parking area was an issue that contributed greatly to the final design solution. The typical regional shopping center is a one level design surrounded by a sea of parking large enough to accommodate the needs of the center. The problem encountered in designing Riverfront Plaza was that the site boundaries were relatively well defined by existing construction to the south, west, and north; and by the river to the east. Fairly early in the design process it became apparent that not all functions would fit on one level, so the possibility of putting parking on the roof, or raising the building and putting parking underneath were examined. The second of these two alternatives was chosen for several reasons, those being first of all the relative convenience of moving people from level to level as opposed to cars; and also the fact that being close to the river, it was felt that merchants would have a greater sense of security with respect to potential flood hazards, although technically the site is raised out of the flood plain. The main problem of this raised
building approach was seen to be the quality of the space underneath the building, for if handled incorrectly it could become a rather dingy parking garage type of space. For this reason, very early in the design process a commitment was made to the development of a 'floating' image for the building, one of lightness which would not weigh down on those people passing under it. Consideration for the quality of the space underneath also strongly influenced the decision to create a single rather than double loaded mall space, which would have made light penetration under the structure an even greater issue. As it now stands, the structure is elevated to essentially a third level to allow for greater openness, with insulated space ventilation ducts hanging from the underside and feeding up into the concourse to create a decorated ceiling for the parking below. Similarly on the north side, return air systems feed off the serice concourse and back to the mechanical area at the second level-east end of the shopping structure. The floating image is further enhanced by the acknowledgement of the fact that to perceive 'floating' one must also perceive that which hugs the ground, or is 'grounded'. This dichotomy of expression, of 'floating' and 'grounded' has served as a major instrument for making form and material decisions. The grounded elements are tight geometric clusters sheathed with opaque 30" modules of porcelain enamel metal panels, while the floating elements are embodied by semi-transparent, semi-reflective glass surfaces with support every 60". Furthermore, the floating elements are made up of
curved surfaces presenting a softer image, more like the clouds its surfaces would reflect. The column detailing supporting the floating structure also reinforces this dichotomy of expression, with massive concrete columns supporting a lighter, more transparent steel column that allows for a visual break between support and supported elements.

The placement of the new construction with respect to the old is also a key element of the design solution. By allowing the new construction to exist as a separate structure joined to the old by small 'links', it was much easier to work with the new as a symbol which would strengthen the image of the area without having to blend with the old. By placing the new structure in the center of the site between Sears and Levee Plaza, the strength of its image is intended to reinforce the market potential of both. This also allows for the pedestrian circulation through the building to coincide with the pedestrian link from Purdue and the village to the riverfront. The fact that the building is raised and is built along what is now Brown St., creates a historical metaphor of the old Brown St. bridge which is no longer extant, as an added although not anticipated bonus to the solution.

With respect to the return of emphasis to the riverfront and its natural beauty, the opportunity was taken to let the riverfront landscape bleed into the site, with trees serving to break up the large expanses of parking. On the north side of the building linear strips of trees bleed through the break between the riverfront activity center and Burnhams sporting
goods store, defining entry into the parking lot, and reinforcing the linearity of the building. On the south side of the building, the trees are allowed to define parking areas which relate to specific entry options into the project. It is felt that this would allow the entire project to relate more strongly with the riverfront landscape, but still using the landscape in a more ordered way, so as to create a transitional link from city to river. This concept of transition is picked up in the geometry of the forms chosen through the site, those closer to the city being more rectilinear or angular, while those towards the river picking up a curvilinear nature. The design of the riverfront activities center was also considered in transition from city to river, from technology to natural systems; and so while maintaining a less dramatic profile than the shopping complex, the roof structure was allowed to 'float' over curved glass panels with the same support details as the shopping complex. In this way a continuity of detailing could be utilized without domination of the riverfront landscape, and the development of inside-outside relationships could strengthen the impact of the river's natural beauty.

In summary, the project seems to be ordered around several basic organizational concepts, those being: 1) The introduction of the building as a symbol designed to revitalized a depressed retail area, 2) The development of a transitional link from the city to the river, from technological systems to natural systems, and 3) The implementation of the dichotomy
of the concepts of 'floating' and 'grounded' as form givers.
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16) VIEW OF RIVERFRONT ACTIVITY CENTER
17) OVERALL VIEW FROM WEST-SOUTH-WEST

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The conclusions noted here will not deal as much with the actual design solution, but rather an evaluation of what was learned through the process of designing, and hence a review of the process itself. I find upon looking back at my process that the real key to the development of an effective design solution is having a clear understanding or being able to define concisely what the critical issues affecting the design are. Without this understanding, it seems that one is left with the alternatives of eclecticism, or a solution which lacks levels of meaning. The second alternative seems to me to be more desirable, for more levels of meaning can always be added out of which an effective design can grow, as I feel was the case with Riverfront Plaza. Eclecticism leaves you with only other designers' ideas; and unless you understand the issues that shape those ideas, and see them as issues applicable to your project, the product will be a solution with little meaning.

I find that in my design process, I have a strong tendency to try and fuse organizational and perceptual issues. By first developing a reasonable understanding of the organizational issues, I then think them through in a perceptual framework, using small thumbnail sketches in an attempt to give the issues a three dimensional manifestation. It is most interesting
to go back and look at the sketches in the first and last half of the preliminary design phase, in relation to a major reassessment of issues priorities at that time. The first portion of the preliminary design phase I assigned a high priority to the resolution of various geometric conflicts, or tension points on the site. In the meantime however, through discussions with my studio critic, it had become apparent that I was ignoring a major issue of the problem, that being the symbolism of the new construction with respect to the renewed vitality it had to offer to the levee area. It was at this point that I began to see the potential for the project to act geometrically independent of the existing buildings. From this point on, the expression of the design was influenced much more heavily by its inherent internal organization. Still attempting to fuse the perceptual and organizational issues, I found myself expanding on the organization by assigning functions geometric forms; expanding lines of movement to cylinders of passage, and accentuating the concept of floating by raising the main concourse another level and introducing grounded entry forms as well. Geometries were allowed to overlap where various functions interacted. That a shift of emphasis from one issue to another made such a dramatic difference, has convinced me of the importance of having a clear understanding of the issues from the very beginning.
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VISUAL MARKER FROM WITHOUT
CIRCULATION MARKER FROM WITHIN
"SEARS"

- Link with "SEARS"
- Parking on roof
- Shops
- Service parking
- CIRCULATION VERTICAL
- Make up for parking loss

"SEARS"
- Link with "SEARS"
- Shops
- Dark service
- Light parking

Road raised out of flood plain-acts as a levee.
BROWN ST. PLAN - LINEAR PEDESTRIAN

1. STREAMING ZONING & ASSOCIATED FEATURES
2. REINFORCED LINEAR LINKS & VILLAGE - PURPOSE
3. FOLLOWING CONTEXT DEVELOPMENT/LINEAR

LEVELS & CONCEPT OF RECEPTION SPACE: STRIPED
LOOKING WEST BETWEEN SEARS & NEW ZOOMER.
TUBE AREAS
BECOME EITHER
K0\%55/ANTERS/RE-
SEATING AREAS

CLEAR

K048