AN ARCHITECTURAL THESIS
by todd thackery
THE ANTHONY WAYNE CENTER:
A Multifunction Urban Complex for Hamilton, Ohio

An Architectural Thesis Project
At Ball State University,
The College of Architecture and Planning,
Muncie, Indiana
From September 1983 to May 1984
By Todd Franklin Thackery
This book is the condensation of nine months of thought, research, design, and drawing.

I would like to thank Bruce Meyer and Jack Wyman for their encouragement, direction, and patience; Tony Costello for never allowing the importance of urban design to be "sold-short"; Dave Mackey for practical and structural criticism; James Steed of the Hamilton architecture firm of Steed Hammond Paul for providing copies of the original drawings which made the inclusion in my thesis project of the old Anthony Wayne Hotel feasible; my studio pals for five years of incomparable experiences and sibling friendship; and my family who supported me with their concern, love, and patience.
This multiuse facility seeks to promote revitalization of downtown Hamilton by providing facilities essential to bringing a social population density back to the downtown area. This project also acts as a link between the center of downtown, the courthouse square, and a proposed river park development along which leisure and recreational facilities as well as residences should be encouraged to develop. The site measures 205 feet by 200 feet and includes a former hotel of historical significance.

The project would be privately developed with incentives given by the city for the creation of the public plaza which would then be maintained by the city.

The new building will be integrated with the existing building, and vertical zoning will separate hotel parking and service below grade, public and commercial at plaza level and one level above, and hotel rooms on the top floors. As the natural grade slopes down toward the river on the site, the plaza will slope up to a plaza and public level one floor above the existing hotel lobby and service entrances. The facility will be oriented toward the middle class businessperson and office worker.

The facilities included will be a small commercial and civic theatre, convenience shops, fast and full service restaurants, a snack bar, a bar and nightclub, an exhibition gallery, public seating, outdoor plaza, and a full service hotel with parking.
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Large-scale environmental design is essential in preparing for mankind's present and future needs. By considering design on this scale we can begin to solve problems of transportation, resource conservation and land use, economic systems, and the quality of environments. Through studying and proposing solutions to these problems, the architect can synthesize these ideas into architectural concepts. These architectural concepts should provide the basis for a design which is sympathetic and well suited to its larger context.

The environmental design process which follows is based upon the analysis of existing strengths and weaknesses, the formulation of goals which should reinforce strengths and improve weaknesses, and finally, concrete proposals designed to implement change.
"The thing is to know what to do."

Louis Isidore Kahn
Fort Hamilton was founded in 1791 near the present location of Founder's Monument. Its location had strategic importance as a frontier fort with the Great Miami River as the boundary, and its location also made use of the river as the prominent means of transportation at this time. The frontier soon moved beyond Hamilton which was then used by Anthony Wayne to launch his campaigns against the Indians. Hamilton became the governmental seat of Butler County when Ohio entered the union. Later, the canal and then the railroad replaced the river as the prime means of transportation, changing the development patterns and paving the way for Hamilton's industry soon to follow in the early 1900's. This period was the period of greatest growth in Hamilton's population and economy.

Industries such as the Beckett Paper Company, the Champion Paper Company, the Mosler Safe Works, Ford, and Fischer Body (a division of General Motors) were either based or had a sizable plant in Hamilton.

After WWII, the conditions were set to begin the decline of the downtown area of Hamilton as in many other cities. The nation's economy had improved, population was multiplying, and accompanied by a decrease in family size, this meant a huge demand in the housing market. Developers capitalized on their new market with expansive housing projects of little planning. The newly formulated "American Dream" of land and house, automobile, and family caught on quickly.

Following this trend of suburban residential development came a trend for auto-accessible suburban shopping. The dominance of suburban shopping was possible because the downtown was not geared to handle large volumes of parking, and the mass transit systems in many cities were scrapped at near the same time for various reasons, suburban land was cheap and taxes were often lower. The downtown merchants were unable to afford the needed improvements nor did they have the space to accommodate much parking. As the downtown continued to decline and land value decreased, space became available in the form of
leveled and paved buildings. Compounding these problems, a portion of the city's industrial base was drawn away by the trend to move to the sun-belt states in recent years.

Today the downtown has lost much of its former vitality. Convenience shopping is in the auto-accessible, suburban developments. Restaurants have gone to the access roads between suburban and principal work areas or shopping areas (one area still being the downtown). Shopper's goods have been consolidated into regional shopping malls with convenient interstate access. Leisure and recreational facilities have been scattered along major intercity routes. But Hamilton's downtown is still the center of local government, banking, office work, and, with Elder Beirman's contribution, shopper's goods.

If we assume the cycle of decay and renewal is a natural process, then both the downtown and the suburbs would be subjected. Suburban post-WWII homes built with a life expectancy of 40 years will become increasing costly to maintain. This means rebuilding, or moving further out or back toward an urban environment. Coupled with increased energy prices and auto expenses, the move to rebuild in the urban area should become increasingly economical.
Seek another major retailer (in addition to Elder Beerman's) to establish in Hamilton's downtown.

Encourage establishment of a wide range of medium and small shops' goods and specialty stores.

Establish an entertainment district along river front and up to courthouse square to encourage dense development of theatres, nightclubs, cinemas, restaurants, and hotels.

Incorporate cultural facilities into the open green network linked by the river walk.

Revitalize the inter-urban rail line to reconnect Cincinnati - Hamilton - Middletown - Dayton. Provide a station at the east end of downtown Hamilton.

Set rigid city boundaries within which urban and suburban development may occur. Outside these boundaries and other city and town boundaries, require a minimum size of improvable property to be 10 acres with a maximum built floor area/site area ratio of .52.
**STRENGTHS**

* Accessible by numerous highways.
* Access by railroad on east and south sides.
* River as natural resource and potential amenity.
* Adjacent to historic "German Town" to north.
* Nearness to prosperous neighborhoods and elderly housing to northeast and west across the river.
* Population and economic base for social and commercial revitalization.
* New auto underpass reduces conflict with railroad to east.

**WEAKNESSES**

* River is undeveloped and polluted as it passes downtown.
* Vacated industrial strip to east and north act as a barrier.
* Low-income, dilapidated residential area to south acts in conflict with intended image of downtown.
* No sense of neighborhood in downtown area.
* River acts as a pedestrian barrier to west.
* Railroad and industrial strip to east acts as barrier to residential population, commercial activity, and transportation.
* Too much thru traffic in downtown.

**GOALS**

* Develop river as public amenity and clean it up.
* Utilize railroad and industrial strip as recognizable boundary for downtown.
* Encourage development in industrial strip which utilizes railroad access.
* Bring vitality back to impoverished area to south.
* Form basis for neighborhood in CBD area.
* Reduce river as a barrier.
* Capitalize on adjacency to "German Town."
* Provide pleasant pedestrian access to downtown from adjacent areas.
* Reduce volume of traffic.
Raise standard for industrial dumping.

* Construct series of small dams with integrated cross walks to raise river to usable volume and lessen impact as pedestrian barrier.

* Develop series of open, green, public spaces and connect with river-side paths at top of levee and at river's edge.

* Encourage re-utilization of vacant industrial facilities which make use of railroad access.

* Formation of "Enterprise Zone" to south of downtown to encourage establishment of locally owned and operated businesses.

* Facilitate individual ownership of residence.

* Encourage employment of residents within neighborhood and CBD.

* Reopen existing school in downtown to be used as elementary school, define students as those within boundaries set to define an urban neighborhood.

* Encourage facilities and festivals which capitalize on the ethnic origins of "German Town."

* Provide recognizable entrance for pedestrians from neighborhoods to downtown.

* Create by-pass on north side of town between 177 and route 4.
STRENGTHS

Efficient movement of traffic through downtown via High, Second and Third Streets and Mission Boulevard.

Adequate parking facilities.

Presence of bus and taxi service.

New auto underpass minimizes conflict with railroad.

WEAKNESSES

High Street acts as a pedestrian barrier.

Insufficient convenient, short-term parking.

Expansive surface parking.

Unclear bus access.

GOALS

To reduce impact of auto on CBD.

To provide convenient and appealing mass transit.

To provide convenient, short-term parking.

To remove "thru" traffic from CBD.

To reduce High Street traffic and orient toward the pedestrian.

To reduce surface parking.
*Establish convenient, fast, and cheap mass transit system thru public subsidies.
  *Connect city center to suburban centers with express buses.
  *Suburban centers would allow free parking for commuters not served by mass transit.
  *Suburban and city center would also be supplied by smaller convenience buses running to local neighborhoods.

*Provide free, short-term, convenience parking with heavy fines for habitual violators.

*Provide this with angle parking along High Street.

*Create by-pass around north side of town from 177 to 4.

*Re-route remaining traffic one-way east on High Street and one-way west on Market Street.

*Widen sidewalks on High Street and enliven with public amenities.

*Create slightly raised crosswalks to emphasize importance of pedestrian.

*Allot tariffs on all rental parking spaces and lesser amounts on privately owned business parking.

*Allot retail stores x-number of un tariffed spaces based on expected use.

*Use tariffs on incentives for below-grade parking and subsidies for mass transit.
LANDUSE ANALYSIS

STRENGTHS

* Good mixture of land use in following functions: Office, Retail, Governmental, Religious, and Semi-public.
* Courthouse Square as center of grouping of governmental buildings.
* High Street is a well defined commercial promenade.

WEAKNESSES

* Absence of residential, cultural and recreational facilities.
* Insufficient commercial facilities to serve as a center.
* River is polluted and undeveloped.
* Lack of facilities which provide evening and weekend activities.
* Expensive parking lots and vacant land.
* Lack of dense development and utilization of upper floors of older buildings.

GOALS

* Increase number of residential and public facilities.
* Increase number of commercial and support facilities.
* Revitalize river as a green, open amenity.
* Increase number of facilities with evening and weekend activities.
* Encourage dense development and full utilization of space.
*INCENTIVES: as in tax breaks or variances in code requirements, or as low interest loans, or as direct assistance.

*Incentives for coordinating existing buildings into new developments, redevelopments, and restorations.

*Incentives for public and commercial functions at street level.

*Incentives for formation of public pedestrian streets through buildings.

*Offer incentives to small owner-operated businesses.

*Incentives for construction and rehabilitation of residential functions.

*Incentives for evening and weekend facilities.

*Incentive for minimum intrusion underground parking.

*Incentives for low ratios of Floor Area/Person - Hours

*Total Floor Area/Buildable Site Ratio based at 4.5 with incentives for a limit of 6.

*INHIBITORS: As in higher taxes or tariffs.

*Inhibitor for high ratios of Floor Area/Person - Hours (downtowns) above grade.

*Inhibitors on surface parking and vacant lots. (Not on patron and short-term parking).

*Inhibitors on facilities which provide environmental pollution (air, water, noise).

*Secure bonds to insure leveled property will be built upon.
STRENGTHS

*Courthouse, square, monument, and axis provide unique elements.

*Consistency of vertical architectural scale.

*Historical setting as a frontier fort in 1791 by General St. Clair and later by Anthony Wayne.

*Presence of many historic buildings of good condition.

WEAKNESSES

*No cohesiveness or consistency in provision of public amenities.

*Streetscape cluttered by utilities, lack of uniform signage and lighting.

*Lack of consistency in horizontal architectural scale and in mass and rhythm.

GOALS

*Provide a consistent, cohesive network of public amenities to unify downtown.

*Reduce visual clutter.

*Provide architectural standards to reinforce existing character.

*Increase awareness of city's historic importance.

*Preserve elements of past.
Establish a characteristic street, sidewalk, landscape, and lighting network.

Establishment of uniform signage code.
- Signage must be integrated with facade (no protruding signage over 1').
- Only white lit signage with accents of color.
- No dynamic use of exterior lighting.

All utilities to be underground.

8 story height limit.

2 story minimum height.

Unbroken architectural masses not to exceed 1/2 city block.

Building setbacks on south side of street above 4th floor with minimum 45° setback on 50% of north facing facade.

Horizontal rhythm not to exceed 2x that of adjacent building.

Vertical rhythm not to exceed ± 20% of the adjacent building.

Building height to street front ratio not to be less than 6 to 12.

Encourage restoration of significant historical facades.

Establish festival celebrating the city's past.
SYNTHESIS OF ENVIRONMENTAL DESIGN OBJECTIVES

*Building function should strive for the ideal of continuous usage and density of people usage.

*Building function should focus on a particular market.

*Building should contribute to a completeness in the function of the urban environment.

*The various parts of a building should be responsive to the urban needs implying a multi-function building.

*Public spaces should be provided to promote an inviting downtown.

*Existing buildings should be worked with to provide a continuity of time and history and to respect those emotions associated with them.

*The building should blend with its environment except for buildings which are located as markers for orientation and have special function.

*Auto influences should be minimized and unobtrusive.

*Provide facilities for civic functions and festivals.
"We tend to put too much emphasis on function,..., rather than how does it affect."

Ieoh Ming Pei
This site was selected because of its ability to embody many of the architectural goals derived from the environmental design process. The special features of this site are its function as the connection between the proposed river park system and the center of the downtown and the presence of a significant building both from a historical and functional view.
*To bring vitality to the downtown by providing compactness and variety.

*To provide 24 hours per day and 7 days per week functions to provide a stable population to encourage safety.

*To provide an inviting public connection between the Courthouse Square and the proposed river park system.

*To integrate the architecture functionally and physically with its surroundings.

*To provide a place for casual social interaction.

*To provide a center for lunch hour, after work, and weekend activities.

*To provide a multi-function complex of complimentary activities.

*Provide minimum intrusion auto accommodations, below grade.

*Provide indoor and outdoor facilities for civic functions and festivals.

*Rehabilitate the existing Anthony Wayne Hotel (now apartments) and incorporate it with the design of the multi-function building.

*To provide an entertainment facility with area appeal to promote a positive economic trend.
ANALYSIS OF DESIGN CONSTRAINTS
SITE CONCEPTS

* Full site utilization to provide density.
* Public, outdoor connection between Courthouse Square and the river.
* Maintain public circulation diagonally through site.
* Sunny outdoor plaza to promote year long comfort.
* Maintain access and light to adjacent buildings.
* Provide minimal intrusion underground parking.
* Maintain service entrance to existing hotel building.
<table>
<thead>
<tr>
<th>FACILITY</th>
<th>AREA (SQUARE FEET)</th>
</tr>
</thead>
<tbody>
<tr>
<td>*500-Seat Theatre</td>
<td>11,900 total</td>
</tr>
<tr>
<td>*Lobby Facilities</td>
<td>1,550</td>
</tr>
<tr>
<td>*Auditorium</td>
<td>3,750</td>
</tr>
<tr>
<td>*Stage</td>
<td>2,000</td>
</tr>
<tr>
<td>*Storage and Support</td>
<td>2,800</td>
</tr>
<tr>
<td>*Actors' Facilities</td>
<td>1,800</td>
</tr>
<tr>
<td>*Commercial and Public Facilities</td>
<td>15,200 total</td>
</tr>
<tr>
<td>*Fast Food Restaurant</td>
<td>1,800</td>
</tr>
<tr>
<td>*Full Service Restaurant</td>
<td>2,100</td>
</tr>
<tr>
<td>*Bar/Nightclub</td>
<td>2,500</td>
</tr>
<tr>
<td>*6 Shops, 300 s.f. each</td>
<td>1,800</td>
</tr>
<tr>
<td>*Exhibition Area</td>
<td>1,000</td>
</tr>
<tr>
<td>*Public Space and Circulation</td>
<td>6,000</td>
</tr>
<tr>
<td>*Hotel Addition</td>
<td>25,800 total</td>
</tr>
<tr>
<td>*60 Rooms, 270 s.f. each</td>
<td>16,200</td>
</tr>
<tr>
<td>*Atrium</td>
<td>2,500</td>
</tr>
<tr>
<td>*Multipurpose Room</td>
<td>1,600</td>
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<tr>
<td>*Support and Mechanical</td>
<td>2,000</td>
</tr>
<tr>
<td>*Circulation</td>
<td>4,500</td>
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<tr>
<td>*Total New Habitable Area</td>
<td>53,900</td>
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<tr>
<td>(New facility and redesigned portion of existing)</td>
<td></td>
</tr>
<tr>
<td>*Public Outdoor Plaza</td>
<td>10,000</td>
</tr>
<tr>
<td>*Parking Garage (147 spaces) and Service</td>
<td>78,000</td>
</tr>
<tr>
<td>*Existing Renovated Facilities</td>
<td>43,000</td>
</tr>
<tr>
<td>*Total Habitable Area</td>
<td>96,900</td>
</tr>
</tbody>
</table>
SCHEMATIC CONCEPTS

* Vertical zoning with parking and service below grade, public and commercial facilities at plaza and gallery levels, and hotel rooms on the top.

* Circulation concentrated at interface of existing and new building.

* 10-degree slope on north face to provide sunlit plaza all year.

* Structural bay based on width of hotel room on upper floors and transferring to a multiple to accommodate parking below grade.

* Triangular truss system (in section) to support hotel facilities above theatre and create a triangular atrium (in section) for the hotel. A semi-independent system around the theatre will provide acoustical isolation.

* Systems to be centrally based above theatre with supply air distributed to space from below and returned via central air plenum at peak of building.

* Hotel room systems to be self-contained except for the renovated rooms.

* To make the theatre operable to create a larger space.

* Redesign second and third floors of existing hotel to be part of the commercial plaza and gallery levels.
"To integrate with the existing hotel especially and also the surroundings by using similar scale, rhythm, elements, and materials. The materials of surrounding public buildings are brick, limestone, terracotta, copper, and slate.

"Detailing, both interior and exterior, should be expressive of the process and human involvement in construction.

"Structural and space defining elements should be massive to better define space through contrast.

"Interior textures, colors, and lighting should provide rich, stimulating contrasts.

"Windows should be operable for flexibility and the humanness implied.

"To provide a system of louvers and glazing over major public spaces for natural, controlled lighting.

"To provide areas of comfortable, public heating.

"To ventilate hotel rooms from a wall unit mounted in the center with windows illuminating the walls on each side. The ventilation unit will provide dimensional continuity with the windows of the existing buildings.

"To create subtle, unobtrusive color contrasts on the exterior in concrete and concrete masonry."
SITE PLAN
LOWEST PARKING
SEVENTH FLOOR PLAN
My design process is a sequential consideration of environmental, functional, aesthetic, and social and psychological factors beginning with those containing the most large-scale considerations, such as regional transportation, and progressing through successively smaller areas and volumes until the smallest-scale details, such as the design of ashtrays, have been designed. The implications of this process on architecture are the ability to deal with a large number of complex issues in relative separation from each other provided that the designer correctly identifies the important issues. The architecture itself begins with the most abstract goals and concepts for the project and is soon followed by the basic program. From this and the site and contextual considerations, schematic volumes and circulation and the form evolve. This is followed by the schematic structure, systems, and basic ordering ideas. After these are complete the design development begins within the volumes earlier assigned to each activity. At this point considerations such as materials, textures, colors, lighting, and usage on the individual scale should be incorporated.
Architecture should be a component of a larger environmental composition. The architectural components of this environment can be divided into two categories: sensory or contextual architecture and cognitive and unique architecture. Sensory or contextual architecture should express a unity and consistency within its environment through the employment of techniques such as scale, rhythm, proportion, materials, elements, and siting. Cognitive and unique architecture should provide focus, orientation, contrast, and multiple levels of interest and meaning. Both categories of architecture may have a contrasting interior, but this is especially important for sensory or contextual architecture. The interior should contain rich colors, contrasts, textures, lighting, materials, and spacial complexity to create a special meaning and surprise. Architecture should be expressive of materials, construction, and the human energy expended in its creation. These ideas of architecture imply a society in which the group is more important than the individual, a community or civically oriented society.
This project has allowed me to explore and define my design process as well as to allow me to evaluate my thoughts and feelings toward architecture and to begin to concretize my personal philosophy. This book embodies the basics of both in my design project which was approached in an intuitive manner so as to allow my attitudes to emerge, be analyzed, and defined. I feel this project has been a success for me based on these grounds as well as for its intrinsic value as a design although it is probably not a realistic economic possibility. In the future I feel my design process could be strengthened through the study of ordering systems, construction techniques and details, and the further study of the affects of specific environments upon behavior.
BIBLIOGRAPHY


