COMMUNITY RESOURCE CENTER

AN ARCHITECTURAL THESIS EXPLORING

CONTEXTUAL DESIGN

STEVE DICKERSON

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DEDICATIONS

This book is dedicated to the one and only C.L.B.G... For "like the leaves so open and giving you are to me".

This book is also dedicated to my Father- through his patient dedication he has taught me perseverance.
Traveling from town to town across the United States an observant person can find a spectrum of different attitudes and values assimilated by the locals. Traveling across the United States this same observant person will also notice an array of different natural environments ranging from broad flat lands to the sharp, rugged mountain peaks. But being an observant person he would also notice the lack of any real, meaningful differences in the built environment. The houses, the factories, the governmental centers, the stores, they all seem to ignore the local context. Why have buildings gone the way of cars, furniture and televisions? They're not made on assembly lines... yet! Surely each community has a desire and a need to express its unique context, its individualism through its architecture, or is it the community's desire to be thought of as part of a larger entity that dictates its building forms.

There is a need to take a look back in time and try to understand what factors have created the current non-discript condition that much architecture is in today, let us also take a look at the benefits that a more contextual, localized approach to design could have on a community.
INTRODUCTION

For centuries population trends have reflected the ideals and aspirations of society. About 175 years ago a major population shift began in the United States. For the first time in history large percentages of people were leaving their rural homes to live and find work in the cities. This trend has continued up until the early 1970's. Now another major population shift has emerged. People are moving back to small towns and rural areas in search of individual identities. Ironically however, in the mid 30's and early 40's small towns had started to go through a major change of their own. This transformation occurred in the relationship towns had to the rest of the world. Previously, towns were simply a piece of a larger region. The region in turn responded to the rest of the world.

The change was initiated due to technological and philosophical advances. The technological advances were in transportation, communication, and production methods. These advances pulled the small town from its regional buffer and plugged it directly into contact with the rest of the world. The philosophical changes that occurred became most obvious in the new architecture the accompanied this technological age.
The "new" architecture was derived from the modern architectural movement. The roots of this movement are set in Europe before the turn of the century. This movement was initiated as a result of architects becoming uncomfortable with the use of traditional styles that tended to be deceptive in both form and function. The buildings their clients needed were also changing from palaces, temples, and cathedrals to houses, schools, factories and office buildings. The modern movement allowed the architect to use a new form language that owed more to modern art and the form of ships, airplanes and warehouses than to the rules and theories for applying the classic architectural orders.

The modern architecture that eventually trickled down to the American small town was at best an abbreviated and grossly distorted version of the much more profound modern architectural movement that originated in Europe. For in its journey into the United States this movement was transformed into nothing more than just another architectural style:

'In their search for a way to use modern technology to address the building needs of the new concentration of urban populations, architects had sought a form language that would not require costly hand labour and ornamentation. The richness and pleasure in form was to come instead from the geometric play of proportions, color and materials.

The spareness of means evoked the search for and heralding of the spare style. But the new style soon became mistaken for its purpose; the medium had become the message.' (1)

All right, so where does that leave us? We currently have small towns that are gaining a new populace (former city dwellers trying to escape the impersonal environment of the city). Looking for the quaint small town their fathers described, they move, but the idealic atmosphere they sought does not exist. Instead they find an environment stratified into three distinct layers. The first being the pre-1930's layer. This consists of the small brick commercial and industrial buildings, the occasional grandiose county court house and the Victorian /pre-victorian dwellings. The second environmental layer is the 1930's-1970's layer, which consists of the quazi-modern building. The third layer we are currently experiencing; it is a response to the disillusionment of the small town's new populace. It is an attempt to construct
INTRODUCTION

Pre 1930's Architectural layer

Modern Architecture

Historic Illusion
INTRODUCTION

an image of a small town that never existed. It consists of plain, non-
discreet buildings with cedar shake
awnings bolted on, masses of renovated
buildings and thematic sub-divisions. In
short this third environmental layer is a
lie.

So now the problem has defined
itself; to compose a realistic, practical
method to express a local identity in an
honest manner.

An architecture that responds to a
local environment and expresses the
uniqueness that each community has can be
a powerful aid in the development of a
community. One of the primary benefits
of this kind of architecture is that it
would help promote a local pride and self
confidence. As George Santayana phrased
it, "People are satisfied only when they
fancy themselves surrounded by objects
and laws independent of their own
nature". I think this is especially true
in the midwest, but simply by expressing
this nature (whether it be through
literature, art or architecture) a
personal pride replaces feelings of
inferiority. This type of contextual
architecture would also act as a unifying
element. By expressing a regions
similarities people tend to identify more
with their communities.
Context, alone, without perception is nothing more than a concept. Context is a flavor, and like a flavor it is to be subjectively judged and described in terms of its traits. Through the many varied subjective vantage points of description the perception of context is heightened.

As a place, context is experienced as a concrete presence with a set of particular qualities that create its character. The character is perceived as the general atmosphere of a place. The texture and massing of the ground, the view of the sky, and the articulation of the wall contribute to the character of a place.

The character of a place is described as a series of many adjectives "this place is enticing; this place is warm; this place is confusing". Since context is composed of the interrelation of many places, and since it takes many adjectives to describe place, one can only begin to imagine the complexity and variety of the contextual character.

The complexity and the variety of this character is infinite but people simplify these intricacies by generalizing the character of a context. The context itself is interpreted at several geographic levels including: country, region, landscape, settlement, building and its sub-places.

Character is perceived as the general atmosphere of a place. The texture and massing of the ground ....

Residents' relation to their context differs from culture to culture and has changed throughout history. Often modern man assumes that science and technology free him from direct relation to his context. By trying to create this separation from his context man has lost some of his ability to orient himself with his environment. He becomes
disassociated and unconcerned with his environment. His buildings become too concentrated on practical function, disregarding their identification with the context.

In "Genius Loci", Norberg Schulz states that a poem "concretises" properties of existence. By this Schulz means that poetry points out general aspects of our existence in a concise, comprehensible way. A poem describing a wind swept field may bring to your conscious feelings and perceptions that you have unconsciously experienced and by doing this these feelings are "concretised".
In this way a poem moves in the opposite direction of science. Science departs from the given by analyzing and abstracting, while poetry brings us back to the concrete things, uncovering the meanings inherent in the live world. Schulz also states that the first function of a building should also be to "concretises" our environment by expressing its character. This contextual expression of the environment is more than just an interesting option to add to an occasional building; it is an imperative ingredient if man is to understand and relate to his context.

One view of our atmosphere.

... The ground's texture

... The view of the sky...

... The articulation of the wall ....
The complexities and varieties of context become more numerous when superimposing a town’s man-made layers of the built environment on the existing natural environment. Here the idea of context not only manifests itself in the natural landscape but in the union (or lack of union) between the architecture and the topography, and also in the social structure and political attitudes that accompany any humane settlement. All of these views and structures are the towns vernacular response to its environment. These elements are the town itself but they need to be acknowledged and expressed ("concretized") in order to be more fully understood.

In the past several mistakes have been made regarding the character of these small towns. Often architects and planners have attempted to undertake mass restoration of downtowns in order to preserve the town’s heritage. While there is a need to acknowledge the past, the context of the town should not be thought of as a museum, dedicated to a certain period in the town’s history. Nor, at the opposite end of the scale, should one relate to the town as a big city waiting to happen. The context of the town not only based in the tradition of yesterday but in the continuity of today and the change of tomorrow. A critical attitude is then needed when evaluating a context. One must try not to be totally accepting of traditions or change nor be totally opposed to them.

Historically, the lower domed courthouses were associated with slower paced, more complacent communities.
In an essay entitled "Types of American Small Towns" Fred E. H. Schroeder makes two assumptions as his initial premise:
1) all small towns are not alike
2) small towns posses architectural symbols to express local beliefs and values.

His analysis provides a method of interpreting the built environment as a statement of generalized community ideals. This can be especially helpful in gaining an initial, preliminary understanding of the town's psychological environment.

Schroeder states that the city itself gives us many clues about its philosophical attitudes, values and priorities. Usually the city develops informal agreements of relations with major community influences called "covenants". Often these covenants are with interstate highways, ports, railroads terminals, or even less obvious economic entities like mobile home parks. Each of these covenants implies a difference in life style, social norms, occupational concentrations, and community values.

The community expresses these covenants in two ways through conscious symbols and unconscious symbols. Conscious symbols take the form of signs, community slogans, statues, courthouses, graffiti, etc. Unconscious symbols of these covenants are found in physical
features of the community like spacial relations, size and orientation. Clues are also found in epitome districts, which are special places in the community that carry layers of history and civic energy, like town squares, coffee shops, lobbies and shopping malls.

Two important considerations when looking at community covenants are; firstly they are normative agreements not official dictates, and secondly these covenants are always evolving. They may change slowly over time or abruptly when the community experiences a major alteration.

While addressing these covenants it must be remember contextual design should not be thought of as simply designing a conservative space to relate to a conservative community or using a local stone as a building veneer but it should accentuate the community’s strong points, address its weaknesses and promote new interests.
To help study the issues of contextualism and its relation to the community, a design project was developed. The project or "case study" was oriented so it would act as a means to an end. That is, it would provide and opportunity for implementation of the contextual issues mentioned previously. The subject of the case study is the design of a community center in the heart of Noblesville, Indiana. This building type requires a great deal of knowledge about the community it is to serve and also allows for contextual expression on many different levels of design. Even of more importance is the embodied statement that the center makes about the personality of its community. This statement becomes the focal point for this thesis because through this statement the community is given the means to express its individual character.

The case study is organized into three stages; development of a community profile, programming of the individual spaces in the community center and the actual design of the community center.

Compiling a community profile is nothing more than a process in which the designer "gets acquainted with" the community he is designing for. In many cases an architect is designing in an unfamiliar setting. The profile is an initial, pre-design phase in which one familiarizes oneself with the many facets of a community including its natural environment, its history, current issues, and future concerns.

The profile stage in this will also help define the specific functions that will go into the community center. The reason for this is because the nature of the community center is to become a supplementary building, offering facilities that are currently none existent in the community. The profile will help to point out these deficiencies.

The programming stage is the stage where the pragmatic functions and special requirements of the individual spaces are determined. It also requires an understanding of the environment so that each space may be tailored to fit the community.

The design stage is the synthesis between the issues made evident by the profile and the pragmatics required by the program. The final design solution is by no means an objective label to be stuck on the community but a subjective expression of the local character and contextual identity. It may be accurate or may be totally "off base" but even the bias, subjective, contextual expression is better than no expression at all.
CASE STUDY - HISTORY

Like many towns, Noblesville's history is rich and a source of civic pride. The land that is now Noblesville was originally occupied by the Delaware Indians in the 1600's and claimed by the French up until the French and Indian war. By 1783 the Americans claimed that territory and started to settle Indiana. An Irish immigrant named William Conner was the first white man to settle in Hamilton county. In 1800 his brother, John Conner, went on to settle Connersville. William grew to be respected a great deal by the Delaware Indians and became close friends with their chief and eventually married his daughter. His close ties with the Delawares kept them from helping the British in the war of 1812.

Because of Conner’s aid in the war the U.S. government gave him much of the land that is now Hamilton county. In 1823 Conner donated several acres in the center part of the county to form a county seat. Conner himself then built a cabin in the city. Here, in Conner's cabin, was located the first post office in town, the Hamilton County Court held its sessions here and here plans for moving the state capitol from Corydon to Indianapolis were drawn up.

Like many other Indiana towns Noblesville prospered in the 1870's and 1880's when natural gas was found. In 1851 Noblesville has its first train pass through, and in 1903 the Inter-Urban made its first appearance.

In 1823 the newly incorporated town of Noblesville received its name with an interesting turn of fate when one of the founding fathers, Josuah Polk, became engaged to a young lady from Indianapolis. He was so infatuated with her that he planted a garden in his yard that spelled out her name - "Lavina Noble". He then promptly convinced the newly formed town council to name the town after her. Well good ol’ Lavina was so embarrassed by all of this commotion that she called off the wedding but the never has gotten around to finding a new name.
The Noblesville Military Band - as they appeared in 1922.

The Noblesville Library's summer "reading room".
The courthouse - shortly after construction was completed.

East Side of Square, Noblesville, Ind.

The interurban - on the east side of the square.
Franklin D. Roosevelt - campaigning in Noblesville.

An unidentified lady showing off her possessions.
Four brothers standing at the intersection of what is now Conner Street and 10th Street.
CASE STUDY

Noblesville is located in Hamilton County. This is the fastest growing county in the state of Indiana, and according to the 1985 Growth Report is supposed to remain so until the year 2020. The current population of 12,000 is expected to triple by the turn of the century. The cause for this growth is the county's proximity to Indianapolis. In fifteen minutes a commuter can get from downtown Noblesville to the northern fringes of Indianapolis, and by using I-465, he can reach almost any part of Indianapolis in forty-five minutes. This accessibility has attracted a new kind of Noblesville resident; the upper-middle class, white collar worker. This new population has settled predominantly in one of several subdivision around Morris Reservoir. This suburbanization of Noblesville has created a somewhat socially segregated community. The boundaries of which are clearly drawn; with "historic Noblesville" on the east side of White River and the "new Noblesville" clustered around the reservoir with three miles of farm land separating them.

The residents on the east side of White River are mainly in the working and middle class. Many are employed by one of two local factories, by the hospital, or by one of the small downtown shops. A large percentage have resided in Noblesville for two or three generations.
Interaction between the subdivision residents and the town residents are limited to Junior/Senior High School activities (there is a separate elementary school for subdivision residents) and occasional encounters at the supermarket. Other than groceries, most items are purchased in Indianapolis. Even many of the social activities occur within the confines of the subdivision clubhouses or at various Indianapolis athletic clubs and lodges.

The growth in Noblesville has spurred the construction of new large scale projects. A new city library has recently been constructed. It moved from its original downtown location to the far east side of incorporated Noblesville. The original library building will most likely be occupied by city offices. A new wing will soon open on the county hospital, increasing its size by 50%.

Future projects are centered around two key community elements; traffic circulation and a new city/county complex. The master plan of Noblesville calls for the new city and county complex to be located on the west side of the courthouse square. The complex consists of two separate buildings, one housing the county offices and court facilities and the other housing the city offices. The plans call for these buildings to share common heating, venting, and air conditioning (H.V.A.C.) systems and underground parking facilities.
The other key community concern, traffic circulation, is being addressed in a long term sense in the thoroughfare plan. The key problem is providing better and more efficient east-west circulation through the downtown area. The "bottleneck" occurs on the west side the White River where the two bridges crossing the river funnel into one major artery. The solution is to construct a new road leading from the Logan Street Bridge, behind the strip development, to highway 38. This is directed at making circulation to the subdivisions easier and creating a bypass around the new development on highway 32.

The development and spread of Noblesville will be contained to a relatively small area. This is caused by the limitations of the sewage system. The system is currently functioning at capacity and will require a major re-design in the near future. Even then the sewage system expansion is contained by highway 37 on the east and Circero Creek on the west.

APPROACH SEQUENCES

The urban context of downtown Noblesville has remained, in some respects, very similar to the way it was a century ago. The majority of the buildings are over 100 years old and are still going strong. Layers of "modernization" have been superimposed over the original urban fabric including; sodium vapor lights, shiny plastic retail signs, and an entourage of street signs. The roads are now paved with black asphalt instead of orange brick pavers and cars have replaced carriages but the density and texture of the city are very much in tact.

In the following analysis, an approach to the center of town has been analyzed from three different perceptual vantage points; character, identifiers, and space. This part of the community profile is to help understand the different perceptual factors that effect the built environment so that the design scheme can relate (through contrast or immolation) to the vernacular.
CHARACTER

This environment is characterized by a definite feeling of containment. The historic retail zone opens up after driving through a densely tree lined, residential avenue and then ends abruptly at the river's edge. This density creates a feeling of belonging and security to one who is familiar with the context but can be somewhat intimidating to an "outsider".

Residents of this community familiarize themselves with their micro environment using local landmarks as orienting elements. These landmarks include the courthouse, the library, and the two bridges crossing the White River.
These elements create points of reference in an area with definite boundaries. These physical and psychological boundaries of Noblesville include White River on the north and west and state road 37 on the east.

Perceived from the "inside" these boundaries create a sense of containment. Perceived from the "outside" they create a sense of arrival.
IDENTIFIERS

Identifying elements become very important in unifying and relating the build environment to a community. In Noblesville several buildings and structures that stand out from the rest of environment. These elements are unique because of their scale, form, massing, location and/or history.

This approach sequences shows two of these identifiers; the court house and the "old" library. The courthouse is the most easily identifiable building. It was designed in 1883 to be the most prominent element in town and has remained so for over 100 years. In this sequence the identifiers orient the traveler to the center of town but disappear from view upon entering the downtown.

Three blocks from the square the "old" library becomes an identifier because of its none conforming geometry and its set back from the building line. The courthouse tower looms above the retail blocks, beaconing the location of the town square.
Two blocks from the square the courthouse tower is still visible but its size has diminished in relation to the rest of the buildings. The library is no longer visible.

One block from the square the courthouse tower is gone from view leaving only a tunneled view down the main street.
SPACES

Spatially Noblesville is divided into several clearly defined zones. The strip development is first encountered as one approaches from the east or west. It is read as being somewhat less dense than the historic zone due to the large amount of parking lots, but it also appears to be very cluttered by an over abundance of signage. The residential zone is encountered as one approaches from the east. Its turn of the century houses are set back from the street, but the density and overhead canopy of the tree lined street gives this zone a very intimate feeling.

The overhead canopy terminates as one leaves the residential zone. Three blocks from the square, the buildings are set back and the space opens up creating a transition from the residential zone to the retail zone.
Two blocks from the square, one perceives the upcoming domain change to the downtown. The visual corridor terminates into a distant line of trees.

One block from the square one perceives entering the downtown zone. The buildings create large vertical walls on either side and their cornicce detailing implies an overhead plane. The high degree of enclosure can be interpreted as creating a sense of security or as being overpowering.
FACADE - DETAILING

The individual facade incorporates three separate vertical zones. The bottom zone, or pedestrian zone, is usually the most articulated; having recessed planes of entry, projecting canopies, and flush display windows. This zone is designed to project a inviting atmosphere. The intermediate zone often houses a separate function from the lower zone. It is usually the least articulated and least detailed of the zones. The upper zone, or building cap, is designed to create a vertical terminus for the building and to relate to the sky through its cornice.

RHYTHMS

The building itself is often horizontally defined by a series of rhythms which are created by pilasters, columns, awnings, brackets and fenestrations. The end walls of the building are occasionally emphasized by larger pilasters or projecting quions. The rhythm at the pedestrian level defines separate functions housed in the building. At the intermediate level the rhythm may change to reflect a functional change, but it will usually reinforce the rhythm at the pedestrian level. The cornice lines often have separate rhythms that relate more to the block than to the building.
BLOCK DIFFERENTIATIONS

Looking at a streetscape in Noblesville, one notices a continual fabric consisting of individual units. The individuality is created by the differences in building massing and detailing. These shapes range from two to three and a half stories in height and from 15' to 35' wide. The rhythm and form of the windows also helps add uniqueness to the building units.

BLOCK UNIFYING ELEMENTS

While consisting of individual units, the blocks maintain a sense of unity. This is due to a constant building set back from the street. Also, most of the buildings address the pedestrian with an array of canopies or recessed spaces at seven to nine feet above the walk. Although the windows are of various sizes and forms, they are all read as “punched openings” which give the streetscape a “collage” atmosphere of similar but different elements. The same type of effect is created with the cornices. They are all designed to create a “cap” for the individual building but also incorporate different rhythms and detailing.
INTRODUCTION

The intent of this section is to give an overview of the function of each individual facility. It discusses how each space is designed to function, including the circulation to and from each facility, how it is to be serviced, the organization of the facility's sub-space and the required managerial spaces that are needed. Of equal importance to these pragmatic concerns is the discussion on the environmental quality of each space. This quality is the abstract notion of what each space should be and how it should feel. Circulation, detailing, lighting, and all other design issues contribute to this spatial quality.
ATHLETIC FACILITY

The athletic facility is intended to be one of two facilities contained within this complex that is specifically targeted at a certain social class and age group. One of the major concerns discovered by the profile was the segregation of the predominantly white collar subdivision residents from the predominantly blue collar town residents. Several facilities should be designed to attract people from both of these social groups. The athletic facility will, of course, be used by the people from many different social classes but will specifically be designed for accommodate local town residents. This space becomes the indoor park, the place neighborhood children can go to "shoot some hoop".

Spatial Requirements

- provide space for instructional classes including sports training, dance instruction, and physical conditioning.
- provide for large multi-use recreational space to accommodate basketball games, aerobics, dancing, and various other recreational games.
- provide men and women’s locker room to accommodate changing, storage of clothes and valuables, showing and restroom facilities.
- provide a lobby area for the gymnasium to act as a control area for the gymnasium. locker rooms, and classroom facilities.
CASE STUDY

GALLERY FACILITY

The gallery space should be a space totally dedicated to expressing Noblesville. It must accomplish three goals.
- 1. present Noblesville to those who are unfamiliar with the city.
- 2. Display and explain the current issues that concern this community.
- 3. Demonstrate a new perspective of this community as an evolving element, changing with time.

These goals should be expressed in the layout of the gallery space. A specific area of the gallery should be dedicated to a semipermanent display area providing the history of Noblesville. A constantly changing area should be used for displays relating to current issues effecting the local community. Examples of this would be such things as displays showing how the new thorough fare plan may benefit Noblesville, or displays showing why Noblesville needs a new city park on the south side.

An area of the gallery should be designed for semipermanent exhibits of future or long term concerns of the community. This may include displays showing where future growth in the community may occur or how the expansion of Indianapolis will effect Noblesville.

Spatial Requirements

- separate exit/entry from exterior
- partial visual division of the three gallery areas.
  1. semipermanent - historical area.
  2. temporary - current issues area.
  3. semipermanent - future concerns area.
- provide some continuity leading people from the arena into the gallery.

Gallery Sketch
THEATER FACILITY

The theater is the second of the facilities which will be targeted at a specific social group. The theater activities should be designed to attract the sub-division residents. It is the one function that the sub-division does not already provide for. They have day care facilities, athletic facilities, and even meeting rooms, but this will be the only public theater besides the high school's. It does not need to be designed to accommodate large, full scale theater performances since the high school theater provides this. Instead, it should accommodate monologue and non-participatory activities including films, lectures, recitals, and dance presentations.

Spatial Requirements

- seating capacity equals 600 people.
- separate entrances to theater lobby.
- ticket facilities and restroom located off of the theater lobby.
- production manager's office off of lobby.
- stage area with minimum 650 square feet.

- film projection and lighting control room.
- backstage area with separate entry/exits.
- restroom facilities for backstage area.
- storage area backstage.

Theater Section
PUBLIC MEETING AREA

This facility should become the location for the fourth branch of the government – the people. This space should be able to accommodate large groups of people and facilitate conversation between them. The problem arises when these large meetings turn into lectures or end up being controlled by a handful of people. To help alleviate this problem a higher tier around the central space should be provided. This will allow for greater interaction between the people in the central space and people in the perimeter space. The space may also be used by smaller community organizations and should have the ability to be sub-divided into smaller meeting rooms. Once sub-divided, each of these areas must be accessible through its own separate entry.

Spatial Requirements

- provide continuity and direct access from the arena into the meeting room.
- Sunken center area should be accessible by the handicapped.
- Provide for a visual connection between the meeting room and the exterior.
CASE STUDY

CHILD DEVELOPMENTAL CENTER

This space is intended to provide for the care, interaction, and development of young children. Specifically, the developmental center is oriented to giving the downtown merchants, local shoppers, and patrons of this complex a secure area to leave their children. While creating a safe place for the children, it is very important that this space be thought of as an active learning center.

It should be organized into zones defined by the degree of activity and the group size. There should be a "soft" space, rich in articulation and variation designed for larger groups of children participating in active, rugged play. Also a number of flexible spaces should be designed to define areas for smaller group activities such as story readings, crafts, and discussions.

A third set of spaces should provide for small areas to promote solitary, more slower paced activities such as reading alone, working puzzles, and personal thought. These spaces need to be somewhat visually and acoustically isolated. Variety is the key in this set of spaces to accommodate the children's many different personalities.

An administration office should be incorporated into this space. It must accommodate the scheduling and management of this facility. It must be large enough for two management personal.

The entire facility must be readily accessible and visible from the major public space. There must be a minimum of two entry/exits.
ARENA

The arena is the nucleus of the complex. It should act as the major entry into the building, responding to the existing pedestrian circulation routes. The scale of the arena should be reduced at the entry and "open up" when one enters.

From the interior the arena should appear as a unifying element, bringing together all of the separate elements into one interactive space. This unification should be done in such a way that it orients and directs people to other various facilities. While the arena should be a place of orientation and circulation. It must also be a place of casual, spontaneous interaction between individuals, where people can go to "just hang out" or meet with friends. This must be a place of activity and excitement, creating a lively, kinetic atmosphere.

Spatial Requirements

- arena should be a large, open space with a circulatory space defined separately from the meeting area.

- Should be open twenty-four hours.

- needs to have the maximum number of entries into the arena to create freedom for circulation.
SITE INVENTORY

The site that this Community Resources Center is located on is in downtown Noblesville, IN. It is on the east shore of the White River, two blocks from the Noblesville courthouse square. An east-west exit runs from the courthouse, through the site and terminates at White River. The site is a partial block defined by the grid street layout. The western portion of the block is cut short by White River. The block between the courthouse and the building site currently has a restaurant, a small machine shop, and several vacant buildings. As stated in the Profile, on this block the Noblesville master plan calls for a new county and city building complex which would also reinforce the courthouse axis.
Conner street, the road to the south of the site, is a major through street in Noblesville. The street to the north is Logan street, which eventually runs to the north side of the square and then into a residential neighborhood. The only two bridges connecting "historic Noblesville" with the west shore are located on either side of the site. The Conner street bridge (to the south) is currently the more heavily traveled of the two bridges. Both bridges not only provide a major connection between the two parts of Noblesville, but also create a major entry-way into the "Historic downtown".

The topography of the downtown has a gentle slope to the edge of White River, but then the slope suddenly drops 18 feet to the water’s edge. The western shore across the river from the site, has a more gradual slope running up from the water’s edge to highway 19. The elevation of the western shore is so low that it has been designated as a flood plane and can not be built on. This creates a pleasant green space across from the site.
CONCEPT DEVELOPMENT - SITE

The relationship of the building to the site is important in expressing the contextual appropriateness of the design. At this stage the information obtained in the Profile can be synthesized with the concepts stated in the Context sections. This is an attempt to create a custom fit building that sensitively responds to its environment.

The following two schemes shows a conceptual analysis of how the building can relate to its environment. To help study this relationship three dimensional concept models were implemented. The blue objects represent the building massing; the red arrows represent the viewing sequence and the black represents a need for a physical connection.

Scheme #1

In this scheme the building massing (blue) has taken an abstracted grid form. This grid form makes reference back to the historical grided layout of the city's road system. The four large masses are sub-divided into several smaller sections. This relates back to the smaller buildings which combine to make up the larger block. The height of each unit is varied to articulate the

Scheme #1 - Looking East
massing of the complex. Through this articulation, the greatest mass can be located adjacent to the bridges thus, creating a gateway into the downtown. A curvilinear element is incorporated within the grid mass, implying a relationship with the river, nature, and the "new Noblesville" on the west side of the river.

The viewing sequence (red) demonstrates how the view to the courthouse is unobstructed from the west side of White River. As people cross the bridge the mass of the Community Center blocks the view of the courthouse. However, after crossing the bridge, the view opens up dramatically creating that sense of entry.
Scheme #2

Scheme number two again implements a grided massing, but here the massing is abstracted to a greater degree by using an overlapping geometry. The individual blocks are also articulated in height, incorporating the greatest massing adjacent to the bridges. The blocks of the building transform and take on a curvilinear form. The curvilinear form is on the banks of the river, providing a close interaction between the building and the river. While the interaction between curvilinear and rectilinear was emphasized in scheme number one, the transition from rectilinear to curvilinear is emphasized here.

The courthouse axis has been addressed by using a very low block on axis. This, in conjunction with locating the greatest massing on each side, creates a none symmetrical axial, extension through the Community Center to the river.

The viewing sequence allows for "on axis views". Then the views are shortened as one nears the building. After making the transition from bridge to town the views slowly open up, creating a gradual transition into the downtown.

A physical connection (black) is required at several points. The building must have some type of physical
connection to the courthouse on the east - west axis. Also, there needs to for a direct connection from the Community Center to the south - east corner of the site. This is to intersect the heavy pedestrian circulation on the south side of the square. To a lesser extent the same type of connection is needed between the building and the north - east corner of the site. This side of the square has much less circulation due to fewer retail facilities being located here.
PRELIMINARY DESIGN

At this stage of the design it was necessary to investigate the integration of the building program with the site concepts to form preliminary building design. To aid in this preliminary development, an additive process was utilized. This is a process in which several design issues are listed that relate to the organization of the Community Center. A preliminary design solution is sketched out, then several more design concerns are added and again a new design solution is drawn. This creates a manageable way to handle many programmatic issues while maintaining a sense of continuity throughout the design process.

In the preliminary design of this Community Center a three phase additive process was used. Many of these issues were taken from Christopher Alexander's book "Pattern Language for Public Spaces".
Phase I

In the initial phase, several design issues were combined with the programmatic requirements. This synthesis occurs within the framework defined by the conceptual schemes. These initial design issues are:
1. Locating main entrances so as to intersect existing pedestrian circulation routes
2. Incorporate an open thoroughfare intersecting these pedestrian routes.
3. To create an active perimeter which incorporates a necklace of community oriented facilities around the complex. Those community facilities include functions such as; child care, the better business bureau, barber shops, etc.

In phase one the building massing is divided by the extension of the courthouse axis. The front of the building is splayed out to funnel the existing pedestrian circulation on the square into the "arena. The perimeter of the building contains many community facilities.
Phase II

In phase II the three issues are added to the phase I solution. They include:

1. A free waiting area which is a space the services share as a common lobby.

2. Incorporation of small activity pockets around the perimeter of the complex.

3. Incorporation of a child care center located in a highly visible area.

The phase II solution has changed the pedestrian thoroughfare into a circulation arena. This allows the courthouse axis to be rotated so that it becomes parallel to the bridges and avoids an awkward relationship. The child care facility is located near the entry so it may be easily accessed. The geometry in the building begins to reflect the conceptual model’s transition from the rectilinear eastern facade to the curvilinear river facade.

* arena is used to denote a public lobby space within the complex.
Phase III

Here three programmatic issues are added to the phase II solution. They include:

1. Incorporation of a community wall, which is a wall given to the community to be used for registering complaints, posting petitions, and orientation.

2. Incorporation of a town meeting area which will have a tiered meeting area.

3. Organization of the functions into common locked and unlocked zones.

The phase III solution incorporates the community wall as the major interceptor of pedestrian circulation on the south portion of the site. The wall's orientation leads people from the corner to the building entry. The building is then organized into three security zones. The first zone contains all of the functions open from nine a.m. to five p.m. The second zone is the nine a.m. to eleven p.m. zone. It includes the public meeting room, theater, gallery and the retail facilities. The third zone is open 24 hours and includes the public arena and other through building circulation areas.

During this third phase an overhead beam was first utilized to bridge the funnelled opening and unify the front facade.
Massing Investigation

In this stage of the design the general orientation of the building on the site had been decided. The west side of the complex would relate to the urban environment by having very planar elements implying "facade" which would stand at a constant setback from the street. The funnel shaped entry would intercept traffic from the axis and from the south side. In the progression from the west to the east the building would transform from the rectilinear geometry to the curvilinear geometry.

With this information in mind, models were used to study the geometrical transformation and the connection between the individual spaces. In this first model each space became a definable mass. A processional theater had been added to the program, and its conical plan made a custom fit transformation from the Conner street bridge to the downtown. The largest single mass in the design, the gymnasium, became the implied gateway for the northern Logan street bridge.
The articulation of the urban wall needed to be studied to determine the type of articulation and detailing it would incorporate. As noted in the Profile, historic blocks have elements that differentiate individual buildings and elements that unify the entire block. To provide continuity among the building, and relate the historic cornice line of the past, a band was implemented to serve as a visual interaction between the historic facade and the modern materials. The next step in this phase was to research the articulation of each individual building in the urban wall. The first inclination was to design the individual building masses with staggered heights within the framework defined by the cornice line. The detailing resembled that of the historic building in form and materials.

Facade Studies

Further studies were examined in which the individual buildings were separated, allowing circulation to occur between and through each facility. This created an "urban screen" as opposed to the earlier proposed "urban wall".
With each facility now standing as a separate building, more investigation was needed on the composition of individual historic buildings. The original design of these buildings used a relatively elaborate front facade. The front facade had a great deal of detailing and used more exotic materials in its construction. The massing behind the front facade was usually made of less expensive materials with little or no detailing. By using different materials on the front facade and enriching it with a greater amount of detailing, this idea was incorporated into the design of the individual units. By shrinking the brick "box" behind the facade, it became articulated as an applied veneer.
The curve of the theater butted into the wall creating a small outdoor plaza for the theater entry. A plaza was also created between the retail facilities and the arena entry.

One of the major problems that the preliminary model made apparent was the circulatory problem between the west side of the building and the theater entry. Pedestrians approaching from the north or west would have to walk out to the edge of the wall at the southwest corner of the building and then turn into the theater plaza. This meant that the wall was going to have to be broken to allow for better circulation as well as better

After investigations were completed another model was constructed incorporating the separate facilities that constitute the urban screen. The community wall was extended through the entire complex from the south-west corner of the site, into the arena where it terminated. Then, on the other side of the arena it continues on into the river. The theater and adjacent meeting rooms begin to take on a more fluid continuity creating a radius between the bridge and Conner street.
visual connections to the theater entry. Initially the wall was perforated in two areas. The first area allowed for circulation to the theater from the plaza. The second perforation had a curvilinear lobby protruding through the wall. This allowed for greater exposure to the theater on the north side of the complex. The problem was that in this playful articulation, the wall had lost much of its original dignity. It no longer seemed to be the orienting element tying the Community Center together. The curving theater lobby had "pushed" the pedestrian away from his wall. Additional investigation lead to a new solution to this circulation problem. Three sections were "sliced" out of the wall and rotated. This created a stepped back entry into the theater lobby. This solution maintained the wall's integrity, did not "push" the pedestrian away from his wall, and allowed the lobby to stay on one side of he wall.

To gain an overview of the vast number of design issues that have been dealt with, a set of preliminary design drawings were compiled and a 1/16 inch scale model was constructed.

The floor plan demonstrates how the gallery space is squeezed in between the theater and the meeting room. This tightness gave the gallery little prominence in the overall plan. The meeting areas incorporated the two level design, which was called for in the program. The circulatory space around the meeting rooms became a promontory with a panoramic view across the river.

A two level promenade was incorporated on the river side of the Community Center. Both promenades were accessible from the north and south sides of the complex. A series of river steps were positioned in the concave segment of the lower walkway. The promenades and the river steps could also be accessed from a terrace directly outside the arena by a set of stairs which brought the pedestrian down to either promenade. These stairs were positioned
CASE STUDY

1/16 inch scale - Preliminary Model
on the side of the wall to maintain that close connection between the pedestrian and the wall.

The day care center had grown considerably from the original design sketches. It is presently located on the river side of the building and given a looser shape with panoramic views up, down, and across the river.

The athletic facility incorporated a service dock tucked inside its outer wall. At the intersection of the gym and the arena a viewing node was created. The curved arena wall slices through the gym on the inside and allows people standing in the arena to look into the gym through the glass wall.
The arena had several problems. The scale of the 20 foot cylinder needed to be reduced to a more human scale, and the skin of the arena cylinder needed to be lightened and dematerialized.

Two studies were performed to address the entry scale. One of the studies examined the idea of pulling pie shaped segments out of the upper portion of the cylinder to create a protective overhead canopy and to help define the two main entries. The other study recessed the lower portion of the cylinder and used a brightly colored planes to make the transition, and to call attention to the entry.
The original arena design called for a series of horizontal trusses radiating out from the center to the inner circle of the columns. Then a series of sloped trusses angled downward to an outer circle of columns. Having these columns on the outside perimeter gave the arena an unwanted heavy feeling. In the revised scheme the problem was solved by utilizing modified bow trusses. This required only one circle of columns and a compression ring located in the center of the dome. With this new structural design the perimeter wall required only enough structure for the wind load on the glass panes. This new structure also incorporated a cantilevered, horizontal bottom chord between the circle of columns and the panes of glass. In the center of the arena the bottom chord arches upward to rest on the compression ring. This created a lower overhead plain over the perimeter of the arena and a dome in the center of the arena.
Preliminary Urban Screen Studies
The urban screen now incorporated a second story, enclosed walkway. This would facilitate the use of the retail shops in cold or wet weather. The walkway was originally incorporated as part of the cornice. It was constructed so that the only detailing to attract attention was "I" section implying a cornice. The rest of the structure was located behind the glass so as not to detract from the detailing of the facade. This facade detailing became an abstraction of the detailing used originally. Modern, extruded metal forms were used to imitate the historic arches, lintels, brackets and quoins.
DESIGN REFINEMENT

After studying the model and the compiled drawings, a number of weak areas were discovered that required further investigation. These weak areas are:
- exterior wall of the gym (east side)
- organization of the gallery space.
- contact with the river.
- Walkway and the proportioning of the main plaza area (between the Community Center entry and the urban Screen).
- Structure of the entire building.
- main entry.
**CASE STUDY**

**design refinement**

Gymnasium Wall

The exterior wall of the gym was too massive and bleak. It would create an intimidating atmosphere for the plaza space. To help alleviate this problem the side of the gym was "saw toothed" to break up the mass and allow light to diffuse into the gym.

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**Gallery**

The gallery space was very awkwardly organized and needed a more prominent entry from the arena. The largest part of the gallery was located away from the arena and the smaller "bottle neck" made a poor entry. To accommodate a more adequate entry from the arena, two major changes had to transpire. First the meeting rooms had to be placed closer to the western segment of the community wall. This, unfortunately, took up some of the outdoor terrace space, but was unavoidable. Secondly, the service hall had to be repositioned under the theater. These two changes opened the gallery's entry up to the arena, eliminating the "bottle neck".

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**Plaza View**

**Gallery Entry**
To aid in bringing more attention to this facility, a small version of the community wall was implemented. Originating in the arena, and terminating in the middle of the gallery, the wall created a physical link between the two facilities. The wall also became the gallery's organizing element by dividing the space up into three spaces. These were the historical exhibit area, the current events area, and the future concerns area. The paving pattern on the floor also helped draw attention and signal out the gallery entry. It incorporated a radial pattern that began in the arena and projected into the gallery.

River Connection

The original reverse curve steps that led from the promenades down to the river seemed to be an awkward appendage onto a graceful facade. The reverse steps also seemed to introvert the design even more than it already was. There needed to be a gradual connection that united the river with the promenades and opened up the west side of the building to the surrounding environment. There is a plan which will eventually change the White River banks into a long, continuous river walk system and the Community Center should embrace this plan with enthusiasm.
The solution to these issues was to add another level onto the promenade. This level was accessible from the banks of the river as well as from inside the building. This lower terrace was segmented so that when the river walk is implemented, the lower level can become part of this proposed river walk. This lower level is a series of platforms, which simulate tiny islands surrounded by water. These platforms are of various heights, so during times of higher water levels some of the platforms would be flooded. This creates a close interaction between the Community Center and the river. This lower promenade steps out in an organic pattern to interact with the termination of the wall. These "islands" created a greater number and variety of platforms to emphasize the wall.
Urban Screen

In the initial design, the squat proportions, oversized openings, and large walkway made for an ungainly, top heavy urban screen. Even the "dematerialization" of the walkway could not lighten the original screen. Only by dramatically increasing the height of the facade could the proper proportions be obtained. The widths of the openings were also reduced to emphasize the verticality. These might have been some of the problems the original designers faced.

The level of detail in the abstraction was left unchanged from the preliminary design. Using the "new materials" in an old way seemed to be the best solution.
Urban Plaza

The design revisions on the urban plaza were simply further investigations of the qualities of spaces contained here. The plaza was organized much the same way as the day care center. That is, it was designed to incorporate three types of groups; large interactive areas, medium sized activity areas, and more intimate, personal areas.

The larger areas were mainly centered around the fountain and the outdoor stage. The medium and smaller areas are predominantly eating spaces, adjacent to one of the two snack bars. These areas have a number of staggered platforms, each one with a table on it. In the winter time, when the tables are gone, these areas still maintain a sculptural quality. The intimate areas have a higher degree of enclosure due to a greater amount of trees and building mass. These areas also incorporate fountains which provide white noise to help acoustically isolate the node.
Structure

The original design of the Community Center required a merging of all the geometries at the arena. This produced an awkward structure. Ruling out the original design left two choices. The first choice was to shrink the dome so it would only cover the center portion of the arena. This left a flat promontory ring which should be pierced by the other facilities. The second choice was to let the dome cover the entire arena, as originally planned, but instead of the facilities piercing the dome, have the dome "cut through" the corners of the surrounding facilities.

The second alternative was eventually chosen. It allowed the interior space to keep that sense of unity created by the single joist design, while maintaining a subtle deference between the circulatory arena and the centralized arena.
Main Entry

Both of the preliminary entry studies seemed to create a very tight, narrow, space. It appeared as if one would feel overwhelmed and trapped between the massing of the wall and the massing of the gym. The entries themselves did not have the feeling of a being a major entry into a public building. The new design considered these deficiencies and began to implement changes.

To open the space up and make it less intimidating a large punched opening was made in the community wall near the main entry. This provided the people a visual escape and brought more sky into view. The entry into the arena became a smaller diameter cylinder, recessed within the larger cylinder. This solution incorporated some of the original ideas from the preliminary entry study, and responded to the two main circulation parts leading to the arena with one recessed plane. This provided the complex with a better propositioned entry.
The following drawings and photographs present the design of the Community Center in its final form. Most of the previous photos and sketches displayed in the section, "design refinement" were taken from this final presentation.

This presentation includes a 1" = 40" context model which demonstrates the relationship between to Community Center and downtown Noblesville. A 1" = 16' scale model was constructed to show the interrelation of the Community Center's various facilities and to demonstrate in a three dimensionally illustrate the quality of space contained within the complex. Six 24" x 36" sheets contain elevations, floor plans, sections, obliques, and perspectives to further explain the design and its components.
General View - Looking Southeast
A COMMUNITY CENTER
FOR NOBLESVILLE, IN
CASE STUDY design refinement

Theater Entry

Arena Entry

Section A - A
SUMMARY

When I first started my thesis, I intended on ultimately coming up with some sort of revolutionary design process that would create a sense of identity for a local community. This was to be done by making a building whose design statement was so obviously a product of the local community that most everyone would see the building as being a tangible, concrete manifestation of their local environment. They would see themselves and their community in this building just as clearly as they would see themselves in a portrait or a bust. What I was after was a way in which architecture could help the smaller communities keep their identities from being lost in the wave of the encroaching metropolis.

The trick to keeping their local identities alive was to make the people of the community proud of who they are; proud of their uniqueness. The way to create this community pride was to simply express the unique local character.

Writers long ago learned the value of expression. A writer may talk of an ordinary object like a dandelion, and he may describe the contrast between the dull green hue of the prickly leaves and the soft yellow hallow of the dandelion's flower. He may talk of its fleeting beauty, as it sprouts green and humble, blossoms with a Baroque radiance, then dies in a gray twilight, all in a matter of a few weeks. Expression like this will make people stop, look at, and maybe even respect the next dandelion they come upon.

I felt this same principle of expression could be used on a large scale to boost a communities self image. If a person sees that someone has gone to the trouble of making a statement about their town, they may begin to take notice of many unique aspects of their environment that they previously took for granite.

These insights into human nature are what I built by thesis around. However, shortly after plunging into this project I realized my first major oversight; one must know the community before one can express the community (and if the designer is from lands far this is difficult). At first this revelation seemed devastating, but then I decided that I would formulate a process in which a designer would go into a community and familiarize himself with it by gathering information about its physical and psychological context. He would then incorporate this information in his building design, thus creating a statement about the community. I realized that this was not financially practical, but I also realized that it wasn't really important to formulate an elaborate contextual profile. What was
important was that the people perceive this building as being as for and about them and their community.

Since the case study was based in my hometown of Noblesville, I never was able to really try out the idea of formulating a contextual profile in a new community. Although, in my case-study I did try to investigate the many areas that I thought vital in a profile of this sort. I looked at the environment of Noblesville as it was in the past, is now, and may be in the future. I conducted interviews with the local citizens to see how they viewed their community and talked to "outsiders" to get their opinions of Noblesville.

Incorporating of this information into a "readable" design was no small task. I had used some historic, rectilinear geometries, in the formation of the initial design concepts but this wasn't easily readable to the average person. To make the correlation obvious, I incorporated several design elements with direct, clear ties to the environment. The community wall was one of these obvious allusions. This wall was to be made from materials quarried at a local site. Part of the wall would have then been incorporated in a display on the indigenous natural environment. The urban screen was another design element with a direct correlation to the community. By keeping the level of abstraction low, The historic association of the facade was unmistakable. I found myself continually trying to make this facade more abstract, but then I realized that I was designing for "normal" people not architects. The average person would not take to time to try and decipher a subtle, abstract reverence.

Through the river promenades I tried to project a sense custom fitting the building to the natural environment. As one crosses the bridge I wanted people to see these stepped terraces as part of the shore line, not as some imposing, alien element.

Now that all is said and done, I feel surprisingly good about the "concreteness" of Noblesville's context through the Community Center. Actually I was surprised at the many ways that architecture can respond to its context, but I know that without a solution to the profile problem my thesis has been severely handicapped.

I have learned a great deal about context and its relation with the community however, I have not formulated a revolutionary contextual design process to be used by others. I hope that during my career I keep in mind what I have learned here, and that I make an opportunity to further try and resolve some of the problems my thesis has touched upon.


