project
suburban decay:

undergraduate thesis

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Abandonment has been constant with the changing dynamics of urban life. People have redefined their lifestyles by moving to different parts of the city, county, state, or nation, resulting in places of residency, manufacturing, commerce, education, and worship being abandoned. Although abandonment is nothing new, the problem is now reaching new heights. In the past five years, retail centers developed on the edges of cities are experiencing a new kind of abandonment: perfectly functioning big box department stores are deciding they have are outgrown their facilities, and are building new, even larger boxes just miles away, offering more comprehensive goods and services. This has created immense holes of enclosed space and acres of parking left as eyesores. Wal-Mart alone has abandoned buildings across the country.

Understand that this project is not about stopping urban sprawl, or stopping the big-box department stores from abandoning their properties. Those problems are immense socio-economic and developmental problems I would not address in a design thesis. However, the problem I am attempting to address in this project is one of abandonment. Wal-Mart alone is responsible for empty shells scattered along our highways. Something must be done. This is my proposal.
The problem of urban decay and abandonment is prevalent in practically every city, large or small, in our country today. The prominence of boarded up buildings is as commonplace as scenes of new development. Shifts in population, increased desire for suburban living, obsolete infrastructure, increased poverty and social ills, and declining political control have influenced urban change, and all have contributed to the disinvestment and abandonment of America's older urban areas and more recently, the first generation of post World War II suburbs. Residents of neighborhoods in inner cities and those in neighborhoods near these sites, complain of a variety of economic and social problems connected to these structures and their mismanaged sites that have fallen into disrepair. An incredible new problem is now facing urban America: the abandonment of retail establishments developed within the last five years on the outskirts of urban centers.

Metropolitan areas have been experiencing massive growth in the past ten years, with major retail corporations moving in and consuming millions of acres of farmland for development on the outskirts of cities, thus continuing to build the latest generation of the "suburban lifestyle." First generation ('50's and '60's) strip malls function as marginalized shopping areas for discount stores, while others have been destroyed for
never development. Amidst their seas of parking lots sit dozens of restaurants, gas stations, and banks. These giant anchor stores embody an image of "bigness," from the size of the facility, to the array of available products, and to the number of people that shop there. The ever-increasing desire to make more money, offer convenience, and sell at lower prices with greater selection has led to the establishment of "superstores," a combination discount store and grocery supermarket. These grotesquely gigantic retail centers even take on larger names, changing Wal-Mart to Wal-Mart Supercenter, Target to Super Target, and K-mart to Big K. Square footage climbs from the already massive 67,000 square feet to an enormous 150,000 square feet. The ultimate concern is that when these new "super" shopping facilities are realized, the city's current Wal-Mart is not enlarged or remodeled, but abandoned, leaving the existing facility completely vacant. It is more economical for the company to continue leasing the building while it lies vacant than to sell to a possible competitor who may detract from their sales. The enormously prosperous Wal-Mart chain currently has abandoned stores throughout the country that are listed on the Wal-Mart Realty website as "available buildings." Other chains such as K-mart, Target, Home Depot, Lowe's, Meijer, Sam's Club, Marsh, and Builder's Square have been known to vacate facilities in the same manner.

This is a national problem, yet solutions to it are rare and, at best, haphazard. I am aware that the larger problem at hand is the one of this incredible lack of growth management, the way in which these companies devour and, and the economic and political conditions that allow this type of development to happen. These massive buildings have been abandoned; this is a fact that cannot be ignored; yet the chain stores, county officials, developers, and most citizens seem oblivious to it - either through ignorance or total bias toward "The American Dream." Public officials tend to act like nothing can be done; and many of their constituents think that the problem is out of their control. The development and real estate industries turn a deaf ear to complaints and continue to be profit driven. This disinvestment and abandonment of buildings is at the root of many problems facing cities today. Empty shells present a waste of resources and lost tax revenues. The abandoned big box stores occupy what was once perfectly good and usable agricultural land. Property values decline at private and public sectors. Abandoned properties not only decrease the value of the property in which they inhabit, but the surrounding property as well. A large vacant big box store will have a hard time attracting smaller retail establishments to fill its surrounding strip mall. Abandoned spaces effect the aesthetic value of the surrounding spaces negatively in both social and economic aspects. Large boarded-up facades with over-
grown parking lots are at best eyesores, bringing no aesthetic pleasure to its surroundings. And finally, abandoned big box stores have a negative impact on public health and safety, promoting illegal activity and creating hazards for nearby residents.

There is no reason to believe that these "edge cities" with their massive abandoned facilities and chaotic surroundings can not be turned from a liability to an asset or catalyst of a greater, more intricate, pedestrian-friendly environment. Crazy as it may seem, cities that are now models of urban life once began as disorganized, chaotic, commercially oriented "civic" centers, just as, or more disorganized as the edge cities of today. According to Charles Dickens, London was incomplete, lacking any sense of organization or plan. But after generations of "tearing it down, rebuilding, re-envisioning, and planting ivy," it became the booming metropolis we know today. Paris and Venice were also wildly muddled conglomerations of buildings. "Modern Venice is venerated as a shrine to livability. But 'people forget that Venice was built by hook or by crook,' says Dennis Romano, a social historian of the early Renaissance. 'Venice was just as mercantilist as our modern world. It was full of land speculators and developers. The merchants' primary concern was the flow of goods, of traffic. Those who romanticize Venice today collapse 1,000 years of history. The architectural harmony of the Piazza San Marco was an accident. It was built over centuries by people who were constantly worried about whether they had enough money." (Garreau – Edgier Cities)
Overly sanguine as it may sound, there is no reason why American cities cannot strive for the same outcome as these seemingly finely tuned urban centers. We have consistently been the most progressive, innovative, adroit nation in the world, why are our cities becoming vast wastelands of overgrown, abandoned commercial spaces, where a sense of community is absent?

“There were a hundred thousand shapes and substances of incompleteness, wildly mingled out of their places, upside down, burrowing in the earth, aspiring in the earth, moldering in the water, and unintelligible as in any dream.” Charles Dickens, 1848
The city of Evansville, Indiana has been experiencing massing amounts of growth in the past 10 years, which has lead to a great amount of abandonment on the edges of the city. As of 1990, there was no retail development east of Burkhardt Road. In just under 10 years, the stretch of the Lloyd Expressway between Burkhardt and Interstate I-164 has been filled with big-boxes, restaurants, and hotels. Not surprisingly, four of the eight recently developed big-boxes have been abandoned. Wal-Mart constructed a "Supercenter" less than a mile down the stretch while Target has a superstore in the works, and the other two stores discontinued business. Also, growth has erupted on the west side of town throughout the past year. Acres and acres of wooded land was cleared of trees and leveled out so that a Wal-Mart Supercenter can be constructed, thus abandoning a normal Wal-Mart less than a half-mile away. Lowes, Home Depots, and Sam's Clubs are popping up left and right, scattered among chain restaurants galore.

The apparent disregard for my hometown's valuable land has prompted me to choose the Wal-Mart on the west side for my site. The site has an interesting level of topography not normally associated with flat big-box sites. The highway is 50 feet higher than the rear of the site. An apartment complex sits directly behind (and below) the site, with no access other than a round-about trip on a nearby road. There is also a great deal of vegetation on and surrounding the site.
In the built environment today, we have managed a complete separation of uses. Homes are located on the outskirts of town, miles away from any shopping opportunities, and schools are almost never passed by on the way to work. Americans sense that something is wrong with this picture. Complaints are voiced, "It takes so long to get to the mall!" and "Why aren't there any good restaurants on our side of town?" but people at times are not even aware that things could be better. We drive through the countless parking lots, not even realizing that we do not have to drive 15 seconds to get from K-mart to Bahama Tan. We shop at windowless big-box department stores and wonder why we lose track of time when we just stop in for a carton of milk. The buildings that surround us are ugly, temporary billboards with little to no respect for their surroundings. Suburbia itself is catered to the automobile - there is no way to get around without one. Pedestrians are physically discriminated against as they attempt to traverse the depths of the commercial environment - roadways are too dangerous and drivers too unforgiving. A sense of community is absent from our daily lives. We sometimes linger at the grocery because it is the only place we may satisfy our craving for social interaction, and could possibly run into someone we know!

This overall desire to live in a community where the pedestrian is honored, where housing meshes with retail, where public interaction is encouraged and welcomed, and where designed buildings stand, has prompted me to attack the challenge of cre-
This proposal for the re-development of a big box department store is a precedent, an example of what could happen in any abandoned big box. Each abandoned site could become the source for a major amenity unique to a community’s needs. Abandoned sites could become libraries or learning centers, sports parks, entertainment supercenters, small business centers, or even convention centers and exhibit halls. Each could help to establish a unique identity for the community. For the purpose of having a focus unique to Evansville, my project will take on the function of a satellite village for the University of Southern Indiana. USI is a suburban campus just five minutes west of the Wal-Mart site. The campus serves mainly commuters, but in the past several years, more and more students from outside the immediate Evansville area are attending. A need for campus housing has arisen as well as a need for college-oriented retail and dining opportunities near campus. This mini-village gives the opportunity to serve the campus and the community while suggesting solutions to the major downsalls of big-box department store site planning.
Adaptive re-use projects involving abandoned suburban facilities are few and far between. One such successful project, however, is the Camino Nuevo Charter Academy. In the MacArthur Park neighborhood in Los Angeles, Daly Genik Architects turned an abandoned mini-mall into a charter elementary school. Serving kindergarten through fifth grade, the 11,000 square foot building is quite small, but its many outdoor rooms and courtyards give it a certain monumentality that was absent from the site before. The facade facing the street features walls pushing and pulling outward, creating areas of landscaping that interact with the sidewalk. The project gives a once suburban site a definite urban feel.
Architects

Lewis Tsurumaki Lewis of New York have proposed a scheme for a new prototype suburb entitled, "New Suburbanism." In their scheme, residences are constructed on top the large expanse of roof of a big box department store, with ramps and roads linking the two by car. Lawns are even included as they allow for sports, cookouts, and other typical suburban activities to take place. Both the residences and retail below share the same HVAC infrastructure.

The project struck me particularly because it incorporates our need and reliance on the automobile into a sort of sarcastic reality. How does this scheme differ from the way we currently live in the suburbs? The distance to and from the big box stores is a little shorter.

The Sienna Architecture Company of Portland, Oregon has been promoting vertical growth throughout the city for the last several years. Principal Gary Reddick literally seeks out projects, finding surface level parking lots and other underdeveloped sites and purposing to the owner a development scheme involving high density infill. He has been successful on several occasions, stacking four new floors on an old automotive warehouse, adding rooftop apartments to an upscale food store, and building high density housing on top of an asphalt parking lot, still keeping each existing space, and even adding a few more.
Early stages of the project consisted mainly of programmatic issues, and the dilemma of whether or not to add housing to the site. Much consideration and thought led me to the decision that housing is an integral aspect, and it would only add emphasis to my thesis concept.

Design began with exploration of an issue that seemed most pressing to the site: parking. I began thoroughly examining parking and how I could make it an asset to the site instead of an overlooked necessity. Early studies included underground and rooftop parking, but I soon realized that in order to complete a realistic, concrete thesis, the parking proposal would have to be a modification of the traditional ground level lot.

Connections were vital to the site, and a serious site development was next addressed. Civic "parks" and public squares were investigated and proposed in many different layouts. Site connections to existing apartments and restaurants were considered.

After my main site concept of a mini-city-grid was established, further site development occurred, as well as the design of several connections and a basic architecture for a typical block was approached. This led to searching for a way to connect the uses to the site and a way to distinguish housing from retail, etc. A major milestone was reached when I decided to merge two grids on the site to establish different geometries to help distinguish uses and delineate public gathering and interaction spaces.
results
Utilizing two grids, one pulled from the existing building, and one from the geometry of the site and surrounding roads, a solution was determined. The site focuses on pedestrian interaction and connection to various site amenities. The main organizing factor is the elevated walkway. Providing a means for residents of the existing apartment complex behind the site to reach the village without a car, the walkway is a light and airy structure that spans the roads and physically connects to three buildings. Each connection provides an event where people can gather and plan to meet. The existing Wal-Mart structural bays provided the basis for the size of the city blocks of the site. Its 35 foot grid was brought out into the parking lot and sectioned off into 70' squares and 35' roads. Each road is just wide enough for two lanes of automobile traffic, two lanes of bicycle traffic, and a landscape island. Each block accommodates a retail opportunity in the lower portion of the building, with residential units above. Both apartment housing (open to both students and community patrons) and dorm/campus housing (students only) are provided above. Parking is pushed to the edges of the site, thus creating an architectural focus from the existing access road in contrast to the traditional sea of parking located in front of the big box. Landscape features are another factor highly contributing to the aesthetic of the site. Trees and park spaces are heavily incorporated into the parking lots, creating places to picnic, jog, or just relax. Runoff water from the site is collected in a small pond to the east of the existing building which has been incorporated into an important site feature.
The existing Wal-Mart occupies a site that has two distinct geometries meeting at the point where the Wal-Mart connects to the adjoining strip mall. After observing topography maps of the area, it was discovered that the Wal-Mart was sited so that it followed a steep ridge along an embankment. The rest of the buildings on the site are aligned on a north/south axis. They are on the same grid as the nearby adjoining roads, Red Bank and Rosenberger. They meet Highway 62 at almost right angles. To develop an organizing element on the site, the two geometries were merged, thus bringing a dynamic feature to the site. The various units of housing on the site relate to the grid of the site, while the retail space relates to the grid of the Wal-Mart. The combining of geometries also brings a level of complexity to the site where the elevated walkway follows the grid of the site. It creates a direct flow of people above the vehicular traffic and brings them to the back of the site, where they can descend to reach the apartments behind. The grids come together inside the existing Wal-Mart structure to form a public gathering / green space. These green spaces then spill out of the structure and organize smaller public / green spaces along three of the blocks. The elevated walkway offers views of these spaces, especially from the three events that occur when the walkway meets the buildings.

* As this is an urban design project, concepts and site planning ideas were my main focus. Individual functions and uses of each retail block have not been programmed specifically.
The treatment of the existing Wal-Mart structure was as issue strongly investigated throughout the project. The empty shell has little or no architectural value, so I decided to re-develop it into several different zones, peeling back various levels of the structure, to show its simple, impermanent construction, and its ability to become more than an enclosed shed. The structure was divided into three zones, aided by the intersecting geometries. (see diagram on right) Each zone has been treated differently, each with a different function. ZONE 1 is altered the least. The west, north, and south walls are saved, a diagonal wall is constructed along the walkway, and the roof is left intact. This zone is used for the receiving area, as well as the university dining services. The restaurant not only serves the campus, but acts as a regular restaurant for community patrons. ZONE 2 serves as the space for the public gathering area. The walls are removed as well as the roof membrane and roof joists and concrete floor slab and tile. ZONE 3 houses four more retail centers. These four buildings are situated under the roof structure of the existing building, but the roof membrane and decking have been removed. Joists and trusses remain intact, providing an element of shade and shadow for a warm experience under the canopy.

All exposed steel will be weather treated, and connections with the new masonry wall to be built in ZONE 1 will have to be treated accordingly. The Wal-Mart is thus transformed into an open structure, capable of public gathering.
zone treatment
existing walls saved
new diagonal wall built
roof left as is
cmu walls, roof
membrane, deck
& joists removed
exposed steel
treated, concrete
floor slab removed
cmu walls removed
roof membrane &
deck removed,
exposed steel
weather treated

new zone function
receiving area
dining services
green space
four retail stores
1. pedestrians
Walking is the primary mode of transportation within the site. Each block is surrounded on four sides with wide sidewalks. The access roads leading to the site are also lined with pedestrian friendly sidewalks. The main pedestrian attraction is the elevated walkway / bridge that connects the north side of the site to the south. The bridge helps pedestrians safely cross the busy access road and provides a place for social interaction.

2. bicycles
College students are some of the main patrons of bike use. The site will accommodate bicycles with safe 5' wide bike lanes on both sides of each street. Two lanes per street has been noted as the safest way to allow for bicycle traffic. Lanes are properly marked with appropriate paint on the concrete and adequate signage to alert motor vehicle drivers of their existence. Bike racks are provided on each retail/housing block.

3. buses
A shuttle bus system is provided on the site with one stop at USI, one on the site, and one at the bridge / access road intersection, running every 10 minutes. The shuttle will accommodate any residents living at the site with quick transportation to campus. This will help alleviate traffic on site and give students the opportunity to live at the site even if they do not own a vehicle. Evansville city METS buses will also be provided space at the bus stops.
Automobile traffic is discouraged on site because of narrow roads and bicycle traffic. However, standard lane widths and adequate parking is provided. It is envisioned that mainly general public will use the spaces, with a restricted residential lot located just south of the site, with easy site access for residents via the elevated walkway. A quick full-service gas station is located at the building connected to the bridge for use by residents.

Goods may not be delivered by large truck to the individual retail sites due to the low height of the pedestrian walkway and safety of site patrons. Delivery vehicles are required to deliver all goods to a central receiving area located under the original Wal-Mart structure, and from there are delivered by small van or golf cart type vehicle to the individual sites.
The prospect of arrival by bus, by bicycle, or on foot is almost always ignored. Such developments were inevitably conceived individually, in no way acknowledging their neighbors on the adjacent plot. Strip developments made no attempt to create a coherent urbanistic assemblage.

James S. Russell
Housing is the final element that completes the concept of a satellite village. Bringing residences into an environment in which retail and public space takes place is the first step in educating the public that our system of complete zoning is not necessarily the best way to live.

Housing for university students and general public is divided into two different scenarios: dorm and apartment options. The apartment option is situated on a typical 70' by 70' block, located directly above the retail shops. A minimum of four units per floor would be located in this block, with porches looking out over the streets. A physical connection could occur directly from the apartment to the elevated walkway. Apartments could have a bedroom, living space with kitchen, and bathroom as seen in the conceptual drawings at the right.

The dorm complexes would cover two typical 70' by 70' blocks and would allow for vehicular traffic flow through a tunnel beneath. Dorm rooms would accommodate two students each, with every two rooms sharing a common shower / toilet room. A lounge space complete with a small kitchenette would reside on each floor. Student access into the building would take place off the street into a housing lobby where a stairwell will connect the residential floors. Each two rooms will also share a sun porch overlooking the street below. Two of these such dorm buildings are planned for the site. There is also available signage space located on each dorm facility which is quite visible from the adjoining roads.
on a thesis completed
We will have to replace a destructive economy of mindless expansion with one that consciously respects earthly limits and human scale. We'll have to give up our fetish for extreme individualism and rediscover public life. We will have to downscale our gigantic enterprises and institutions -- corporations, governments, banks, schools, hospitals, markets, farms -- and learn to live locally, hence responsibly. We will have to drive less and create decent public transportation that people want to use. We will have to produce less garbage (including pollution) and consume less fossil fuel. We will have to reacquire the lost art of civic planning and redesign our rules for building. If we can do these things, we may be able to recreate a nation of places worth caring about, places of enduring quality and memorable character.

James Howard Kunstler

An urban design project was not a thesis I would have imagined doing in my early years as an architectural student, but looking back to the beginning of my fifth year, there is no other project I would have rather accomplished. I have learned a great deal that I feel will be invaluable as I go forward into the profession in just a few months. It is important to me that I attempted to tackle a problem that has plagued my mind for so long. Now, driving down the interstate I start to imagine my design sitting in vast abandoned store parking lots, and I wonder if something of the sort could be a reality someday. This is a problem that needs to be addressed. Wal-Mart will continue to abandon stores, what will be done with the shells? I am also pleased to say that I addressed a real problem facing practically every city today- that most are afraid to touch. I feel I brought issues to the table that are ignored, or at best, overlooked.

If I had more time, (and energy), I would further develop some of the green spaces on the site, and work with landscapes architects as consultants. I would further design the elevated walkway, incorporating many more points of vertical circulation along its length.

Overall, I am happy with my solution.
Cheek, Lawrence W., "Loophole Masters," architecture (June 2000)
Toderian, Brenton, "Big Box Retailing: How are Municipalities Reacting?" Plan Canada (November 1996) 25-8.