Reconsidering the American strip mall

During the rapid postwar suburban expansion, thousands of small shopping centers—nondescript, one-story, automobile-centered buildings—sprang up across the United States. Eventually, the consumer’s appetite grew and the strip mall was superseded by larger shopping malls and regional ‘lifestyle centers’. Many strip malls now languish—solid but poorly maintained products of a now obsolete business model, the domain of high-turnover dollar stores and payday lenders. Too ugly and vulgar for ‘respectable’ architects or preservationists, these buildings are in a kind of architectural limbo. When the design profession does address such an unlovely structure, the solution is almost invariably to knock it down and replace it with a new ‘green’ building.

Sadly, what we fail to consider is that the embodied energy spent when a perfectly good old building is demolished is often far greater than any savings produced by the most sustainable new building. We tend to assume that the best solution to a problem is to clean the slate and start from scratch with a brand new concept—this is true of architects and urban planners alike. Instead of taking responsibility for the previous acts of the profession and cleaning up our mess, it is more exciting to declare a fresh, bold start free from those past mistakes.

This project makes the radical proposition that in fact, saving some of the ugliest and most problematic buildings represents our greatest opportunity to improve the built environment and conserve natural resources. These aging buildings sit in the heart of first-ring suburbs; they were designed to be simple and flexible. Architects as public servants need to take on a new ethical imperative—take these ‘bad’ buildings and help them to become beautiful, integrated, productive parts of the community.
Reconnecting to the community

This particular strip mall in South Milwaukee, Wisconsin was selected after a thorough analysis of potential sites in the region. The 1960s building is structurally sound, yet it is in disrepair and mostly vacant due in part to a larger, newer shopping center down the street. The site is at the junction of two major thoroughfares and marks a transition between busy commercial district and residential neighborhoods. Through a quirk of history, the land is an aggregation of several previous lots resulting in a mixed-use zoning designation. The building itself is an undesirable neighbor—six houses rest in the crook of its L-shaped plan, their backyards facing dumpsters and loading docks.

One of the primary goals for rehabilitation is to connect this building to its users and to the surrounding community. This requires one to look past the architectural prejudice that regards strip malls as inherently degraded buildings. Small adjustments, changes in use/configuration, and addressing issues of human comfort can radically alter the impact of a building without resorting to extensive demolition. Programmatic moves like the introduction of different uses (farmers market, café, urban farm, school) connect the building to different people at different times of the day, week, and year. Site-scaled moves like the creation of sheltering elements to hold the formerly vacant street edges and transformation of the service drive into a series of backyard-like gardens create new connections to the immediate surroundings. Building scaled moves include the introduction of variation in blank facades through material selection and the alterations in the building’s shape. Finally, human-scaled interventions like built-in seating, warm natural finishes to touch, and opportunities for personalization of space encourage a sense of connection and ownership.

farm + school

There is great precedent for the adaptive reuse of commercial buildings by public schools. The economy and flexibility achieved by re-purposing an existing structure is appealing to school districts working on shoestring budgets. What’s groundbreaking here is the vision of a government-mandated dropout prevention program as a public-private partnership between educators, at-risk youth and a working urban farm. Students in these types of programs are on the fringes of the system—they have often been labeled as troublemakers or slackers with little future potential. Charter programs like the South Milwaukee consortium school at the heart of this project continually prove these labels to be false. Given the opportunity to excel and a nurturing environment, these students often graduate ahead of their classmates through the accelerated program of study. The restoration of a harmonious balance between building and community is mirrored in the school’s mission to restore at-risk youth to harmony with their community of peers.
Aquaculture attempts to duplicate the ecosystem of a river in miniature. At the scale of a greenhouse, the various components of this ecology are vertically stacked to conserve space. At the top of the system are fruit- or vegetable-bearing plants like tomatoes and cucumbers. Water-cress, a valuable water-filtering plant, is grown on the intermediate level and fish swim in the bottommost trough. Once the aquaculture apparatus is established, the only input is a small amount of electricity to drive the water circulation system. The ecosystem is otherwise self-sustaining as the plants and fish continually maintain the pH and nutrient balance of the environment. The harvesting of both fish and plants also keeps the system in check.

Reinventing the supermarket

Imagine a new kind of supermarket—a place where food grows right on the shelves instead of being shipped there from far-away places. Imagine a supermarket where you can buy local strawberries in December. Imagine walking up and down the aisles and harvesting your food at the peak of freshness, smelling the rich aroma of growing things all around you. Finally, imagine that this new supermarket lives in the very same building as your old supermarket. Surprisingly, this is not a vision from some science fiction utopia—this is being done right now with 2x4s and plastic tubs in greenhouses and garages. A nationally recognized organization located on a scant two acres of land, this non-profit urban farm uses low-cost, innovative techniques like aquaculture and vermiculture to produce large amounts of food year round. Partnerships with local breweries and coffee roasters provide free high-quality compost ingredients like used hops and coffee grounds.

We seek to build on this precedent by turning the traditional supermarket on its head—conspicuously occupying the site of a former market and using the same commercial shelving components. By drawing direct parallels to the retail experience, shoppers are hopefully led to question the true contents and costs required for a normal supermarket to put the same food on the same shelves in little boxes. The convenience of a grocery store with labeled aisles is combined with daylight streaming in from skylights cut into the roof instead of cold fluorescent lights and the sound of rushing water in the aquaculture system instead of clanging shopping carts. This is the future of local food.
Rediscovering the history of the land

The landscape of southeastern Wisconsin was carved into rolling hills and valleys by the retreating action of glaciers at the end of the last ice age. The 1836 Survey of Public Land describes ravines, willow marshes, large oak and hickory trees growing in the midst of what is now suburban Milwaukee. Rather than seeking to restore a perfect, pristine version of this environment, we choose to embrace the messy interaction between humans and the land. The site’s open spaces become a work of historical fiction, a landscape in miniature.

What once was asphalt is transformed into a tallgrass prairie recalling the oak savanna that once ranged across this part of the country. It is more like a three-dimensional geology textbook than a park; with helpful side-bars and important text in boldface type.

It is an educational tool that invites one to closely examine its working parts- the slope and shape of the terrain forms a ersatz glacial moraine. The implied retreat path of the glacier is marked by lowland grasses and surrounded on either side by paths of ‘glacial till’ made with gravel recycled from the parking surface. Ridges of bedrock exposed by tons of ice are represented by stone gabion benches made with concrete from the selective demolition of the existing strip mall. Fractures in the earth run through the site and are even visible in the floors of the building yet their geometry derives from the intersecting grids and lot lines drawn by human planners and surveyors.

The casual visitor finds a pleasant place to sit or stroll in the midst of the suburbs. Others, however, will learn about native plants and how they can become part of gardens on small, tight plots of land. This is not a nature preserve- it is a visual essay about alternatives to the lawn.
In his classic work on environmental conservation, *A Sand County Almanac*, Aldo Leopold made an impassioned case for a land ethic. Observing the impact of careless land use in the sand country of central Wisconsin, he concluded that “All ethics so far evolved rest upon a single premise: the individual is a member of a community of interdependent parts. [...] The land ethic simply enlarges the boundaries of community to soils, waters, plants, and animals, or collectively, the land.” We declare our allegiance to this ethic by committing ourselves to finding new ways of producing food locally, by reintroducing native plants in the suburban landscape, and by giving disenfranchised young people the opportunity to become leaders.

This project demonstrates the possibility of rehabilitating an impaired building on a degraded site. It provides a model of how this act could be repeated by identifying similar sites in similar areas. It is a definition of sustainability achieved not with expensive new technologies but through the sensible reuse of existing infrastructure.

This project also proposes an architectural corollary to the land ethic. By treating an existing building as having its own kind of ecology, the architect should seek to conserve energy by making small moves and treading lightly. This is similar in principle to the restoration of biological systems: massive changes like amputation or transplantation can cause shock or destruction of those systems. It is more often preferable to make minor corrections and replace small parts and allow the system to find its own equilibrium. Acting not only as designers of new buildings, architects can also begin to become stewards of the existing stock of buildings.

---

Renewing the land ethic

In his classic work on environmental conservation, *A Sand County Almanac*, Aldo Leopold made an impassioned case for a land ethic. Observing the impact of careless land use in the sand country of central Wisconsin, he concluded that “All ethics so far evolved rest upon a single premise: the individual is a member of a community of interdependent parts. [...] The land ethic simply enlarges the boundaries of community to soils, waters, plants, and animals, or collectively, the land.” We declare our allegiance to this ethic by committing ourselves to finding new ways of producing food locally, by reintroducing native plants in the suburban landscape, and by giving disenfranchised young people the opportunity to become leaders.

This project demonstrates the possibility of rehabilitating an impaired building on a degraded site. It provides a model of how this act could be repeated by identifying similar sites in similar areas. It is a definition of sustainability achieved not with expensive new technologies but through the sensible reuse of existing infrastructure.

This project also proposes an architectural corollary to the land ethic. By treating an existing building as having its own kind of ecology, the architect should seek to conserve energy by making small moves and treading lightly. This is similar in principle to the restoration of biological systems: massive changes like amputation or transplantation can cause shock or destruction of those systems. It is more often preferable to make minor corrections and replace small parts and allow the system to find its own equilibrium. Acting not only as designers of new buildings, architects can also begin to become stewards of the existing stock of buildings.