

METABOLIZING OBSOLESCENCE: STRATEGIES FOR THE DEAD MALL

BY

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THESIS

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## ABSTRACT

Landscapes evolve and adapt; yet obsolescence is a unique condition. Obsolescence occurs when such spaces are not used as was originally intended but still maintain some of the original qualities and characteristics. Obsolescence is partially viewed as a tangible repository of memories over time. It is time that creates change and causes obsolescence, thus such landscapes are always short-term even though they might have been designed for permanence. Although such areas may be viewed as blight upon the landscape, they can be potential prospects for repurposing. Certain factors can contribute to obsolescence in landscapes. Examining obsolete landscapes and those design strategies which leading to effective revitalization sheds light upon opportunities presented by dead malls in the American landscape.

The Lincoln Square Mall of Urbana, Illinois, is analyzed as a case study to determine how obsolescence occurred and what strategies were effective for regaining vitality. This thesis utilizes the concepts of landscape architecture to formulate additional strategies and proposes one of these strategies to be used for the Lincoln Square Mall's transformation. The strategies described are intended to improve site functionality, stimulate community development, and create value in landscape voids left by obsolescence. Furthermore since such areas are common, this thesis provides a methodology for design strategy development. This methodology was heavily influenced by the theory of metabolic circulation. While the methodology is developed for application to dead mall sites, its utility is applicable to other forms of obsolete landscapes.

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## CHAPTER 1: INTRODUCTION

Obsolescent dead malls that have fallen out of use share a distinctive look of decay with deteriorated building structure, cracks in the parking lot and vegetative overgrowth. The Dixie Square Mall is typical of many dead malls in the American landscape. Images of the mall are referenced in Figures 1.1-1.4. While the image of Dixie Square Mall appears as blight on the landscape and is looked down upon as an eyesore in the local community, there is potential for rebirth. In a world that changes over time, the Dixie Square Mall along with other Dead Malls, failed to adapt and became obsolete. However, what if such sites could be used for something else. Could the site experience a metabolizing of obsolescence the leads to new forms and functions?

Dead malls in the American Landscape are indicative of other obsolescent typologies. Many shipping yards, warehouses, factories, railroads, military and industrial sites have become obsolete and left to decay. The obsolescent sites share the component of time. It can be said that time is the driving force for this thesis topic, shopping malls were new, but became old dead malls. However through metabolizing obsolescence the role of these sites can be renewed. Obsolescent landscapes and typologies will be examined in this chapter including a discussion about the different types of obsolescence and examples are given.



**Fig. 1.1** Image of Dixie Square Mall taken by Brian Ulrich from his exhibit *Copia-Retail, Thrift, and Dark Stores, 2001-11* at the Cleveland Museum of Art. 2006



**Fig. 1.2** Dixie Square Mall, taken by Brian Ulrich. *Copia-Retail, Thrift, and Dark Stores, 2001-11* exhibit. 2006



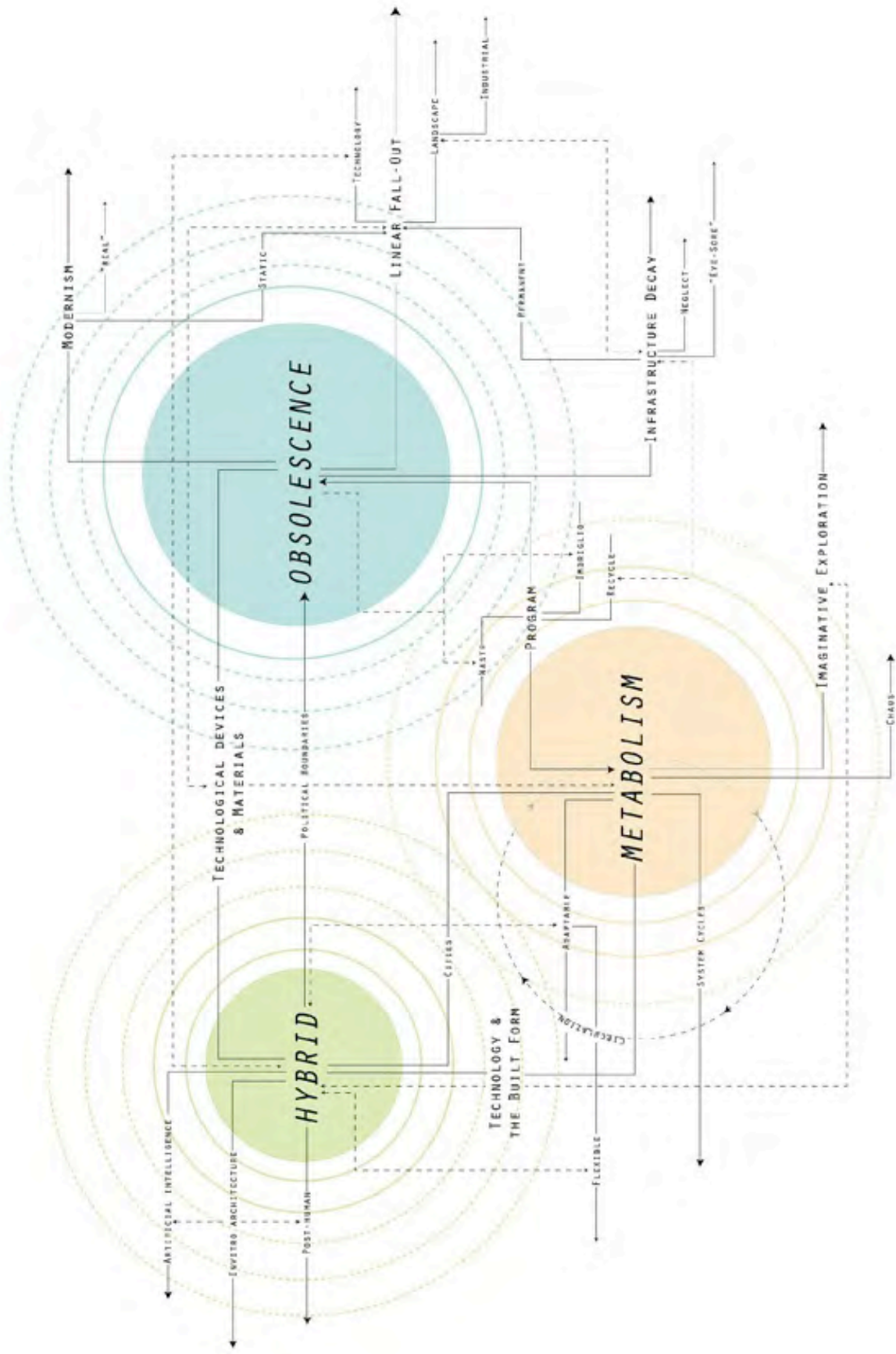
**Fig. 1.3** Front cover of mall directory. Image found at [en.wikipedia.org/wiki/Dixie\\_Square\\_Mall](http://en.wikipedia.org/wiki/Dixie_Square_Mall)



**Fig. 1.4** Image of outside of Dixie Square Mall. As posted on [http://deadmalls.com/malls/dixie\\_mall.html](http://deadmalls.com/malls/dixie_mall.html)

## 1.1 Research Overview

This thesis explores themes of obsolescence in the contemporary American landscape and seeks strategies for renewal and re-use of obsolete sites. The thesis work explored the numerous biological and architectural metaphors. Metabolism, as a biological metaphor, could be used strategically to generate new forms and functions within the landscape (Tarr, 1999). The principal theoretical framework of “metabolism,” defined as the integration of multiple functions over time, is applied to the design strategies. The relationship between obsolescence and metabolism is shown in Fig. 1.5. This thesis focuses upon the consumer landscape “dead mall,” as an example of obsolescence strategies to address dead malls and similarly obsolescent sites are described. Research methods include literature review and study use of projective design strategies in similar situations. This research approach enables the discovery of potential opportunities for future reuse and repurposing of these sites.



**Fig. 1.5** Diagram by author analyzing the relationships between obsolescence, metabolism and hybrid



## 1.2 Obsolescence

Obsolescence is described as the state of an object, place, service or practice that is no longer being used. It frequently occurs because a replacement has become available that is superior in one or more aspects. The root term obsolete refers to something that is already disused or discarded, or antiquated (Brown, 1994).

Typically, obsolescence is preceded by a gradual decline in popularity.

Obsolescence is important in defining these objects and landscapes. The question of “What should be done with this site?” or “What is the next step to make this site viable?” arises after a landscape has ceased functioning in its designated role. In the language of obsolescence, certain terminology is significant when designating these types of landscape obsolescence. In the following paragraphs, four types of obsolescence will be discussed in detail including planned, technical, style and postponement obsolescence.

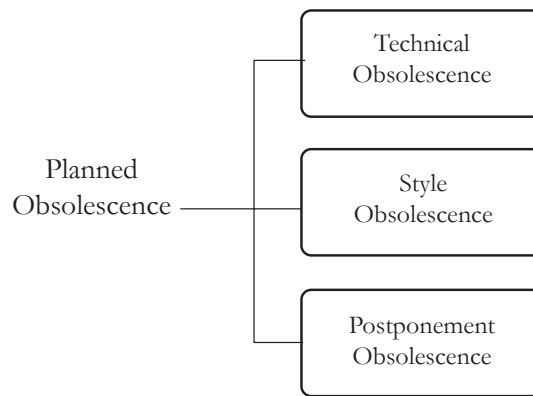
*Planned Obsolescence* is the purposeful designing of a product to have a limited useful life. The product will become obsolete when it is unfashionable or no longer functional after a certain period of time (Keeble, 2013, 11). Industrial designer Brooks Stevens first coined the term “planned obsolescence” in 1954. Brooks stated that it is “Instilling the buyer the desire to own something a little newer, a little better, a little sooner than is necessary” (Stevens, 1960, 12). This type of obsolescence has potential benefits for the producer because in order to continue using the product, the consumer is pressured to purchase a replacement. Generally,



there is an *information asymmetry* between the producer who knows how long the product was designed to last and the consumer who does not (Guiltinan, 2009). Many types of electronic devices and wearable equipment (such as shoes or clothing) fall under the category of planned obsolescence. Examples of planned obsolescence exist within the landscape: landfills, coal mines, quarries, oilfields, and perhaps even trailer courts. The landscape designer, environmental engineer, owner or the investor realizes that eventually there will be a depletion of resource or knows there is a limit to the available space (Berger, 2006).

As a consequence of planned obsolescence, a great deal of excess waste is generated, and negative impacts on society and the environment result. The producer's rapid product upgrading can cause negative environmental consequences. Aside from consumption of resources during production of the planned, the products often have negative affects when they are discarded. There are also increased costs to the consumer, as the products must continually be bought over the course of the consumer's lifetime (Guiltinan, 2009).

Planned Obsolescence has evolved into many sub-categories such as technical obsolescence, style obsolescence and postponement obsolescence as described in detail below. Each sub-category has their own identities that keep them as separate entities (Keeble, 2013, 11). A diagram of the categories of obsolescence is depicted in Figure 1.6.



**Fig. 1.6** Subcategories of Planned Obsolescence

*Technical Obsolescence* occurs when a new product or technology supersedes the old and becomes preferred (Cook, 1997). Utilization of the new technology in place of the old can occur even if the old product is still functional. The front porch, an American architectural extension of the home, held many functions including a place where members could enjoy a cool shaded area during the day or a place to feel the cooler breeze at night during periods of hot weather. After WWII, the development of the air conditioner soon led to the decline of the porch since the porch's primary need was no longer there. Air-conditioning, produced through electricity rather than architectural design, is a good example of a new technology superseding the old (Cook, 1997).

*Style Obsolescence* occurs when the product is no longer desirable because it has gone out of the popular fashion or out of style. Such was true for many of the landscapes designed by Dan Kiley, a landscape architect who used modernism

techniques and the grid formation in his designs during the mid-twentieth century. He designed hundreds of gardens, public, private, institutional and residential, all within his signature modernist style. However, this grid design has proven challenging and outdated for some landscape stewards. As a result many of Kiley's projects have been destroyed or redesigned (Birnbaum, 2013).

*Postponement obsolescence* refers to a situation when technological improvements are not introduced to a product, even though they could be (Hunt, 2005). For example when an auto manufacturer develops a new feature for its line of cars but chooses not to implement that feature in the production of the least expensive car in its product line. The obsolescence is delayed until the features can be installed in readily available cars.

A dead mall, such as Dixie Square Mall and Lincoln Square Mall, strongly remains under the categories of planned obsolescence. These spaces were built to last a predetermined length of time, perhaps 20 years, before being replaced by newer and most times bigger shopping centers. Also, when not maintained the mall infrastructure will begin the process of decay and fall into obsolescence. It is important to understand the different types of planned obsolescence in order to be able to identify which design strategies can be used to turn obsolescence into valuable opportunities.

### ***Examples of Strategies Used for Planned Obsolescence Landscapes***

A good example of planned obsolescence in the landscape is the former Freshkills Landfill, located near New York City. The 3,000-acre site was at one time a low-lying salt marsh that was transformed into a landfill around 1947. The site was initially intended to be operational for a limited number of years (Sukalich, 2012). The Freshkills landfill slowly filled. By 1972, it had reached beyond capacity and was estimated to have contained roughly 150 million tons of waste. In 1999, NYC Mayor Rudolph Giuliani announced that Freshkills landfill would be closing and that the city would be shipping its trash to South Carolina. The landfill was planned to last 20 to 30 years before reaching full capacity and then closed becoming obsolete in previous form and function (Goldberger, 2011).

The community saw the towering mounds of trash as an eyesore. The firm Field Operations, led by James Corner was selected to transform the Freshkills Landfill into a public park. The designs of his park are referenced in Figures 1.7 and 1.8. During the design of the reclamation, the firm decided to avoid reinventing the landscape completely.



**Fig. 1.7** Diagrams of Freshkills Landfill Design, Field Operations.  
[Landscape and urbanism.blogspot.com/2008/11/corner-marketing.html](http://Landscape and urbanism.blogspot.com/2008/11/corner-marketing.html)

They focused on using sound ecological procedures and considered the public would remember it primarily as a landfill. The firm chose to allow certain aspects to



**Fig. 1.8** Image of Freshkills Landfill Design, Field Operations

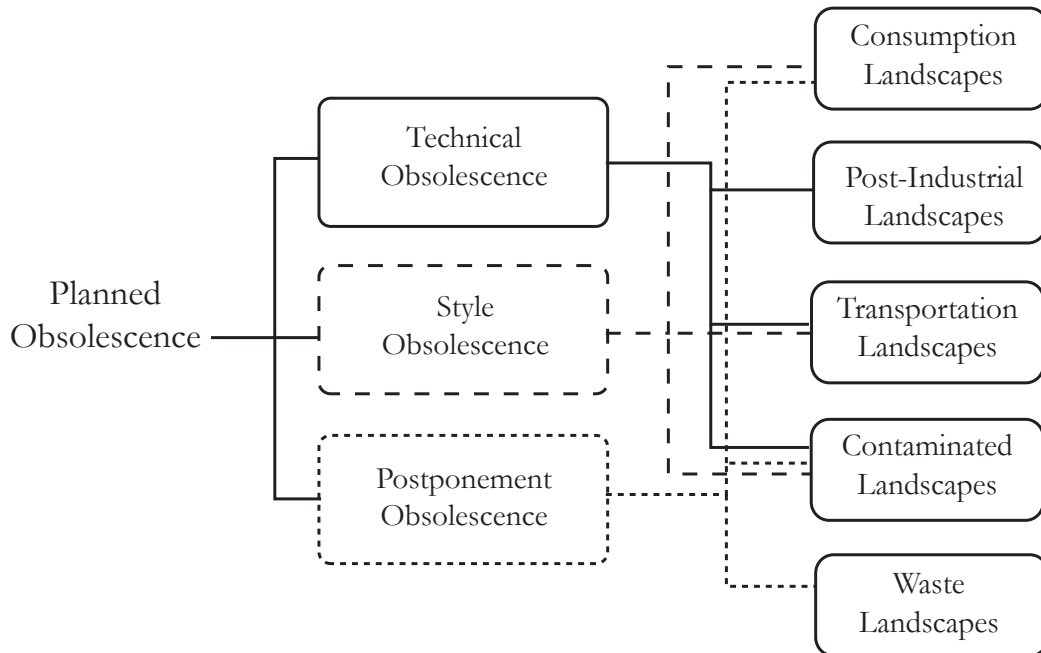
remain. The firm recognized the landfill as a palimpsest, as something that is to remain upon the landscape in the form of tangible ruins and as a part of the social collective memory. At the date of this writing the firm

was in the process of reclaiming the landscape. Their efforts have focused upon ecological restoration and the use of recycled materials as park infrastructure. The firm understood that Freshkills Park is a postindustrial landmark rising from the mounds of 20<sup>th</sup>-century waste (Sullivan, 2008).

### 1.3 Landscapes of Obsolescence + Revitalization

Landscapes of obsolescence are often degraded, and abandoned, with decaying infrastructure. The public may view the landscape's derelict state as permanent. Characterized as *wasted space*, these landscapes are often located within city centers and in the periphery. These wasted spaces originate from aggressive historical development, from industrialization, and poorly planned urban sprawl. They represent forms and functions that are no longer viable in today's society (Chung et al., 2001).

In the following section these five types of landscapes are defined in order to understand the typologies and definitions related to landscape obsolescence. A diagram of the categories of landscapes in relation to planned obsolescence is depicted in Figure 1.9.



**Fig. 1.9** Diagram of the relationships between planned obsolescence and landscape typologies

**Consumption Landscapes:** Indoor shopping malls were at one time prime areas for consumers; however, over time new shopping spaces developed, leaving the original indoor malls abandoned or dying. Along with major infrastructure, huge empty spaces and parking lots are included in this type of landscape (Dobuzinskis, 2004). They are generally located within the suburban regions surrounding cities. In 2007, Rackspace, a Web hosting company, moved their headquarters into a deserted

shopping mall located in San Antonio, Texas. This move represented one of the largest and quickest recycling efforts involving abandoned shopping malls. The mall was creatively transformed from an eyesore into a workspace that included extra amenities such as a two-story slide, a giant chessboard and multitude of conference rooms. However, with all the renovations, there is still no mistaking what this used to be, a shopping mall and relic of the collective memory (Murphy, 2012).

***Post-Industrial and Manufacturing Landscapes:*** are recognized as obsolete landscapes. The large buildings and abandoned infrastructure on these sites may have legacy pollutants present from their days of productivity (Tarr, 20002). The infrastructure is often decaying and damaged to the point of being unsafe. Such sites are generally relics from the era of heavy manufacturing, which became obsolescent when the industrial core devalued and the landscape fell into a derelict state.

An example of a post-industrial landscape is Landschaftspark Duisburg Nord (North Duisburg Landscape Park), located in the heart of Germany's densely populated Ruhr District. Formerly the site of an industrial blast furnace, Landschaftspark Duisburg Nord was designed into a post-industrial park by the firm of Latz + Partners. The park maintains its industrial heritage and dramatically altered natural conditions while epitomizing an innovative approach as an urban cultural public landscape (Stilgenbauer, 2005). The factory's infrastructure still stands but has been transformed into a recreational center.



***Transportation Landscapes:*** are those landscapes that result when a mode of transportation is abandoned. The classic example is unused railroad tracks in a state of disrepair. The impacts are scattered over broad stretches of land and intersect through towns and cities (Sullivan, 2008). Railroad tracks are etching in a landscape, a remembrance of a time before the vehicle highway system was developed to transport goods and passengers across the nation. The land once used for transportation is now unproductive but is full of potential.

A recently completed project, “The Highline”, is a prime example of an obsolescence transportation landscape that has become dynamic and functional through strategic design. The former elevated New York Central Railroad was open in 1934 for trains carrying milk, meat, produce and raw and manufactured goods. However, in the following decades the trucking industry began carrying the majority of goods and shipping by rail on the highline became less competitive. The rail line closed in the 1980’s. During the 1990’s the line laid unused, with most of the original rail infrastructures was still in place and structurally sound.

The non-profit group *Friends of the High Line* fought for the preservation and reuse of the highline as public open space rather than the slated demolition. Later a park/greenway was designed and constructed, led by James Corner from Field Operations and architects Diller Scofidio + Renfro with planting design by Piet Oudolf. The historic structure of the elevated rail line remains physically intact and is present within the collective memory of those who visit the park. This abandoned railway line has been recycled into an urban park that has spurred economic benefits in that section of New York City. This project provided the opportunity to

rethink the factors of obsolescence and the relationships between infrastructure, ecology and society within the urban context (Goldberger, 2011).

**Waste Landscapes:** Landfills, junkyards, and scrap yards are landscapes full of obsolescent products discarded by the consumer society. Such sites eventually become filled to capacity and are abandoned or phased out (Sukalich, 2012). Waste landscapes are typically not designed to be in plain site; rather such sites are hidden from society. A prime example of waste landscapes is the Fresh Kills Landfill, located on Staten Island in New York City.

**Contaminated Landscapes:** This serves as a special category because many different landscapes can be incorporated into this typology. The similarity among the landscapes is a level of contamination in the water and soil on site. Airports, waste and dumping sites, industrial sites that produce or use chemicals/metals with their products are typically known as *Superfund* sites. These sites are known to release hazardous substances into the air or water system; and may endanger the public health or the environment. The Environmental Protection Agency has a list of such sites on the Agency for Toxic Substances and Disease Registry (ATSDR) website and is a player in the cleanup efforts involving such types of landscapes. Julie Bargmann, D.I.R.T. Studio and Site Design Group, Ltd designed Stearns Quarry Park, located in Chicago, IL. This park was a limestone quarry from 1833 to 1969. Then became a landfill for construction debris but now serves as a public recreational space (Wagendorf III, 2010).

### ***An Emerging Change in View Point***

At a point in the past these types of landscapes were fully functioning and provided economic and social growth. While constructed to be permanent, such infrastructure could not withstand the changes over time despite their permanency of construction. These permanent fixtures in the landscape should not be viewed as eyesores, rather as exciting opportunities. Possible values in obsolescent landscapes are depicted in Figure 1.10.

There is now a shift in viewing the landscape fabric (specifically in urban context) not as static but instead as dynamic and temporal. These derelict sites such as dead malls, closed industrial factories and abandoned railroads are emergent conditions demanding that designers and planners revise their strategic approaches. Designers must look beyond the limits of infrastructure and staged surfaces towards functions on a larger scale often dynamic and unforeseen (Wall, 1999). This is precisely what Architect and planner Victor Gruen proclaimed, during a conference in 1955,

Architecture today cannot concern itself only with that one set of structures that happen to stand upright and be hollow “buildings” in the conventional sense. It must concern itself with all man-made elements that form our environments: with roads and highways, with signs and posters, with outdoor spaces as created by structures, and with cityscape and landscape.

(Hardwick 2004, 60-61)

Gruen was describing the concerns of many designers, “What to do with such spaces and landscapes?” The concern applies to both certain individual derelict sites and to landscapes on a larger scale. One should consider society and the systems as elements woven into the landscape fabric.

## Post-Industrial



Ecosystem Habitat



Palimpsest



Reuse/Repurpose



Public Park

## Transportation



Reuse/Repurpose



Habitat



Economic Growth



Public Park

## Waste



Remediation



Habitat



Clean Energy



Public Park

## Consumption



Economic Growth



Reuse/Repurpose



Programming



Artistic Expression

## Contaminated



Remediation



Habitat



Memorial



Public Park

Fig. 1.10 Diagram by author depicting values in obsolescent landscape typologies

## 1.4 Research Methods

### *Data Collection*

The literature review portion of the thesis was focused on obsolescence typologies, historical and geographical information and also researching design strategies that have been previously applied to similar case studies. Data was obtained from sources such as the ICSC (International Council of Shopping Centers), information databases and also cultural and media websites. Extensive data about generic types of landscape obsolescence was collected from the Center for Land Use Interpretation (CLUI) and various book resources. Also, cultural data was acquired through records kept by the Champaign County Historical Society pertaining to the Lincoln Square Mall located in Urbana, IL.

### *Selection of Operational Site*

The resources available and the location and type of obsolescence influenced the selection of the site. The authors' particular interest in *dead malls* as a type of landscape obsolescence led to the exploration of Lincoln Square Mall, in Urbana, IL. The advantage of a local site was ease of physical access, and opportunities to obtain historic documents and information pertaining to the mall and the surrounding area. Also Lincoln Square Mall holds specific significance as being one of the first enclosed malls built in the country by well-known architect Victor Gruen. One could easily envision the surrounding area as holding high potential for urban renewal.

### *Precedent Study*

Precedent examples include projects that transformed existing dead mall infrastructure into spaces with dynamic functions of change and highly visible forms. The precedent studies are depicted in Figures 1.11 and 1.12.

Schouwburgplein (located in Rotterdam, Netherlands) serves as a good example.

Formerly a dead urban space; the area was transformed into a contemporary stage for festivals and installations. The design is flexible in usage throughout the seasons.

MFO Park (Radershall), a public park built on the former area of an engine manufacturing plant, includes vegetation systems and accommodates a number of different activities. Mass MoCA (located in Massachusetts, designed by D.I.R.T.

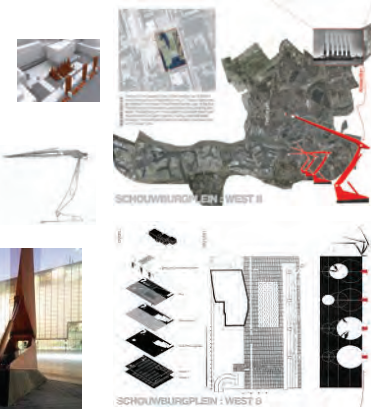
Studio) was once an abandoned textile-printing mill turned into an art gallery interwoven with commercial businesses and community services (Crisman, 2012).

TerraGram Highline Proposal (Julie Bargmann in collaboration with MVVA) proposed creating an ecological site of an abandoned railroad while inserting temporal functioning into the site fabric. The proposal also combined excellent design strategies with ecological and socio/economic systems (Berrizbeitia, 2009).

## Schouwburgplein/ Theater Square

Rotterdam, The Netherlands  
West 8

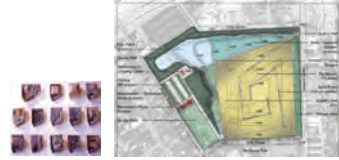
The site was formerly a dead urban space, hardly used and dilapidated. It was redesigned into a contemporary urban square equipped for temporary programming such as festivals and installations. Interactive public space and flexible between forms and functions.



## Stearns Quarry Park

Chicago, IL  
Julie Bargmann (D.I.R.T. Studio)

The site was once a limestone quarry, opened in the 1930's and then closed by 1970. It was transformed into a park by the importation of fill, truckloads dumped and sculpted, the landfill site was remediated and then transformed into a series of treatment gardens.



## Sunnyside Piazza "Share-It-Square"

Portland, WA  
The City Repair Project and Residents

Sunnyside Piazza is an inner Portland street intersection that surrounds neighbors converted into a community gathering place. The Piazza includes a giant street mural based on the image of a sunflower, as well as a community kiosk and an art wall created with natural building techniques by artists and local residents.



## Tanner Springs Park

Portland, WA  
Atelier Dreiseitl

The site was stripped away of the old industrial cover to reconnect the neighborhood to the pre-industrial wetlands which dominated the area. There is an art installation along the east side of the park, composed of rail tracks recovered from the area that date back to 1898.



## The High Line

New York City, New York  
Field Operations and Diller + Scofidio and Renfro

The strategy of the High Line combines the organic building materials on site and the dynamic mixture of wild and cultivated vegetation to give a pseudo-unkept complexity. The design provides flexibility and responsiveness to the dynamic context of the site.



## Urban Dry Dock No.1

Philadelphia, Pennsylvania  
Julie Bargmann (D.I.R.T. Studio)

The Urban Outfitters campus is on a submerged historic Dry Dock No.1: a three mile riverfront walk and expansion of public realm. Design was intent on leaving certain elements while building around them to create a regenerated landscape.

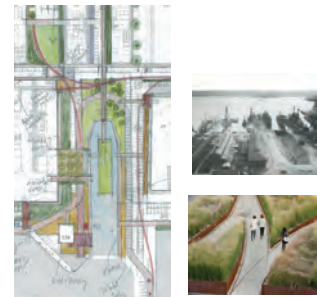


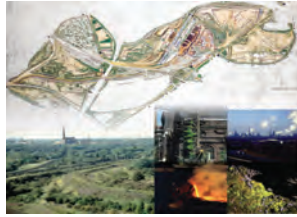
Fig. 1.11 Precedent Study for Thesis



## Landschaftspark Duisburg-Nord

Duisburg Nord, Germany  
Latz + Partner

The site was a former coal and steel production plant, abandoned in 1985. The designers intention was to work to heal and understand the past rather than erasing it. Using phyto remediation to remediate the soil and found new uses for many of the old structures.



## Fire-Escape Ecosystem

Fair St. Housing, London, UK  
GROSS MAX + Mark Dion

The abandoned fire escape facade is designed to have an ecological complexity. Integrated with water flow and irrigation.



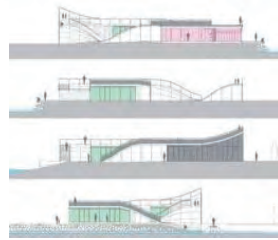
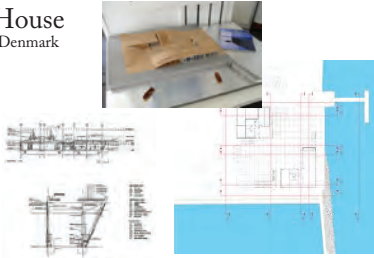
"Delirious Piranesi in bloom"  
Thanging garden launches an ecological gradient up the building facade.



## Maritime Youth House

Sundby Harbor, Copenhagen, Denmark  
PLOT

Harbor was contaminated with heavy metals, a wooden deck was designed to cover the site as a buffer. The deck is multifunctional to allow boat storage underneath and also an exciting play area for the kids (residents) of the youth house.



## MASS MoCA

North Adams, MA  
Julie Bargmann (D.I.R.T. Studio)

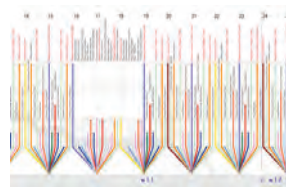
An abandoned textile printing mill now houses a contemporary art collection. Former work yards have become public venues for music and film. Enriching the community network of art institutions and integrating new forms and functions.



## MFO Park

Zurich, Switzerland  
Raderschall Landscape Architects

MFO is a public park in what was once a former engine factory "Maschinenfabrik Oerlikon". Climbing vines cover the trellis infrastructure. A lily pad shaped pond and the fabricated steel frame create an enriched user experience on site.



## Safe Zone Playground

International Garden Festival, Les Jardins de Métis/Reford Gardens  
Stoss Landscape Urbanism

The temporary garden utilized safety products turned or stretched into new forms and coerced into a public space. Opening up possibilities for free, uninhibited play and exploration in a dynamic and temporary garden installation.

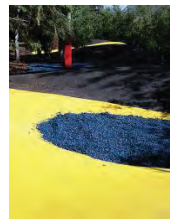
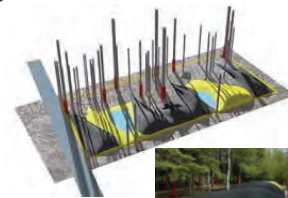


Fig. 1.12 Precedent Study for Thesis

### *Proposed Design Model*

Through research, analysis and design exploration during the thesis process, this study proposes several design strategies aimed at using obsolescence as a catalyst for opportunities. The proposed approach is also intended for use in a wide range of other obsolescent landscape typologies.

### *Research Significance*

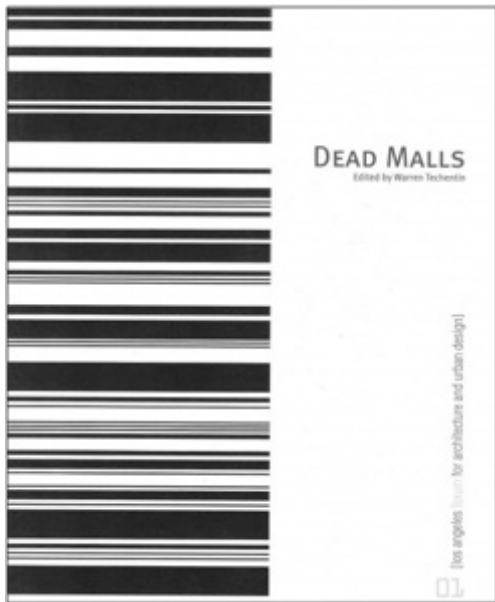
Obsolescent landscapes generally do not have high economic value and are viewed as eyesores in the community. There is no guarantee for success after the design strategies are implemented. However, considering the number of sites across the U.S. that fall into the obsolescence category, it is important to develop strategies to better utilize these sites. Furthermore, there is a great need for open community spaces that such obsolescence sites could provide. Meeting the challenge of achieving this goal is supported by the 'metabolic theory' in which temporality and adaptability is a necessary part of design. As designers we are able come up with the innovative solutions and create new opportunities that were previously unavailable.

In 1999, the Los Angeles Forum for Architecture decided to hold a design competition devoted to the ubiquitous presence of Dead Malls, which "ultimately called for the redesign of malls that risked obsolescence" (Dobuzinkis, 2004). There is no denying that these formerly bustling centers of retail commerce that are existing in a lifeless form along highways and the centers of towns which have outgrown them.

The founders of the Dead Malls Competition, Warren Techentin and the Los Angeles forum for Architecture and Urban Design, believed that all malls fall under planned obsolescence, all malls are designed to fail. Such spaces exist in a reduced complexity, have only one theme, are not adaptable to change and are disconnected from the urban fabric (Hunt, 2005).

This is why the Dead Malls Competition had enabled designers in the fields of Architecture and Landscape Architecture a platform to be forward thinking and more optimistic about the efficient uses for Dead Malls (Dobuzinskis, 2004). Examples of the Dead Mall Competition are depicted in Figure 1.13. The competitors' devised improvements for future based on the existing needs. Each entrant also relied on a series of hybrid strategies, many revolving around the theories of "circular metabolism" to bring the malls back to life. Figure 1.14 depicts the differences between obsolescence and the metabolism cycle.

The cycle of life and death of the mall is partially attributed to aesthetic issues. A lack-luster appearance of struggling and dead malls gives the public an impersonation of the mall as being aged and depressed. As part of the unique skill sets Architects and Landscape Architects are equipped with, designers must also acquire serious foresight into design. Do not use the previous model of designing for permanence and longevity; the mall must be designed for continual transformation – an ever-changing set of forms, colors and materials (Techentin, 2005).



**Fig. 1.13** (A) Cover of the Dead Malls Competition Booklet, URL: <http://www.wtarch.com/projects/research>; (B) Competition website main page, URL: <http://www.wtarch.com/projects/research>; (C) Competition Finalist: Pell Mall by Stoner Meek Landscape and Urbanism, URL: <http://www.core77.com/reactor/deadmalls.asp>; (D) Competition Finalist: Statistical Projection by Central Office of Architecture, URL: <http://www.laforum.org/content/competitions/dead-malls-results>

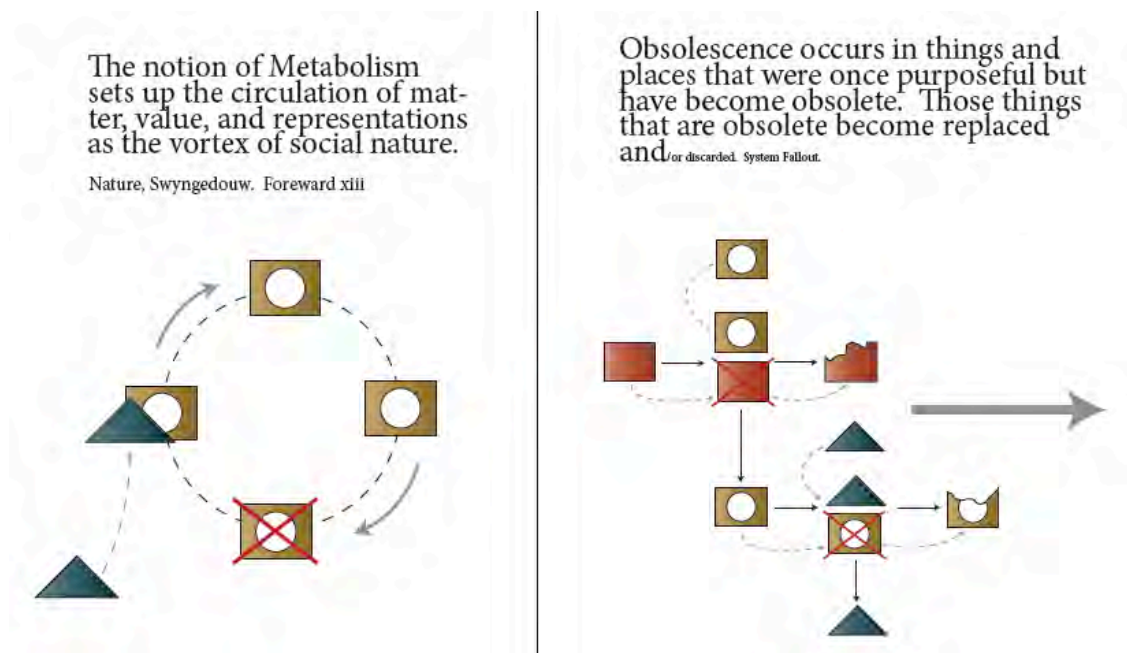


These eyesores, such as Dead Malls, should be a market of great community potential and ready for business. It could also be seen as an opportunity to explore the integration of ecological and social strategies into the repurposing of such structures. Malls increasingly need to accommodate the presence of “e-talling” or online retail. Dead Malls could be catalysts used to integrate such technology as part of the foreword thinking of design.

Dead malls must be seen as great shells that may hold a myriad of opportunities with the application of creative development, renovation and reprogramming strategies.

(Techentin, 2005, 16)

Dead malls, such types of landscapes are prevalent in the American Landscape. Obsolescence, mostly planned and the sub-categories, is not unique and can be transformed into valuable opportunities through strategic designs.



**Fig 1.14** Diagram by author depicting the differences between the continuous Metabolism cycle and the more linear Obsolescence cycle

## CHAPTER 2: LITERATURE REVIEW

The literature review focuses on metabolism in relation to obsolescence in landscapes, and design strategies. These design strategies include researching 'metabolism' and 'circulation' theories, dead mall typologies and how the theories can be applied to this particular type of landscape obsolescence.

### 2.1 Decline of the Shopping Mall

In the late 1990's newer retail formats such as power-centers, outlet malls and online shopping websites became models for consumer shopping. Power-centers for example consist of three or more big box retailers with parking lots shared between the stores Internet retailing was heralded as the wave of the future and a threat to the stability of the storefront shopping industry. Development of new shopping malls halted in the mid-1990s due to the credit crunch. The development decreased by nearly 70%, from 1,510 construction starts in 1989 to 451 starts in 1993 (ICSC, 1999). During the 1990's smaller regional malls appeared to be in a state of decline. Many eventually closed their doors, leaving the infrastructure and parking intact to deteriorate over time. The traditional shopping mall had experienced the highest vacancy rates of 9.2% in 20 years (McBride, 2012). The diagram in Figure 2.1 shows the number of dead malls listed per most states in the U.S.

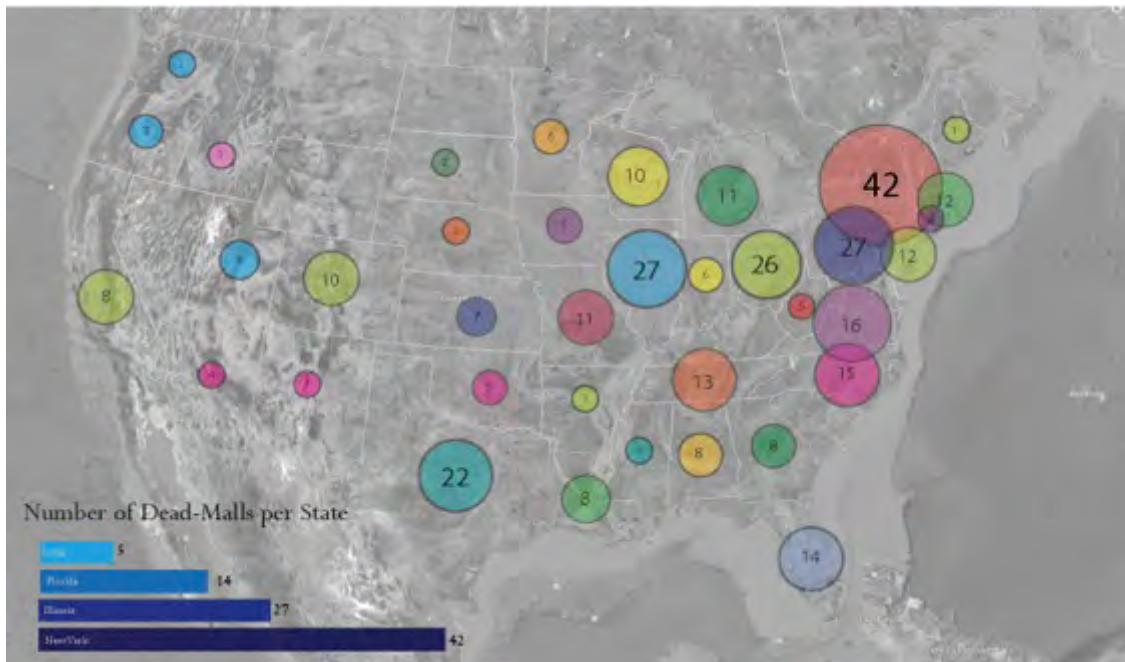
#### *Dead Mall Typology - Obsolescence*

As defined by the International Council on Shopping Centers (ICSC) a 'dead mall' is a "shopping mall with a high vacancy rate or a low consumer traffic level,

that is dated or deteriorating in some manner”. Such mall typologies often have no surviving anchor store (often a large department store) and are unable to cover maintenance costs of the mall facility (ICSC, 1999).

Enclosed malls rely on a business model that could not change with the times. Strip-malls and big box stores gave people the timesaving advantage of walking-in and then out of a store without having to spend time strolling through the mall to reach their destination. Also, most specialty stores have lost business because the consumer is able to get most specialty items online.

Dead malls are prevalent throughout the country, primarily located within the first and second ring of suburbs around a city. Few of these malls are located within the city center. According to at 2009 survey (ICSC) there are it least 108,000 shopping centers in America and approximately 1 in 5 malls are failing (Chung et. al., 2001)

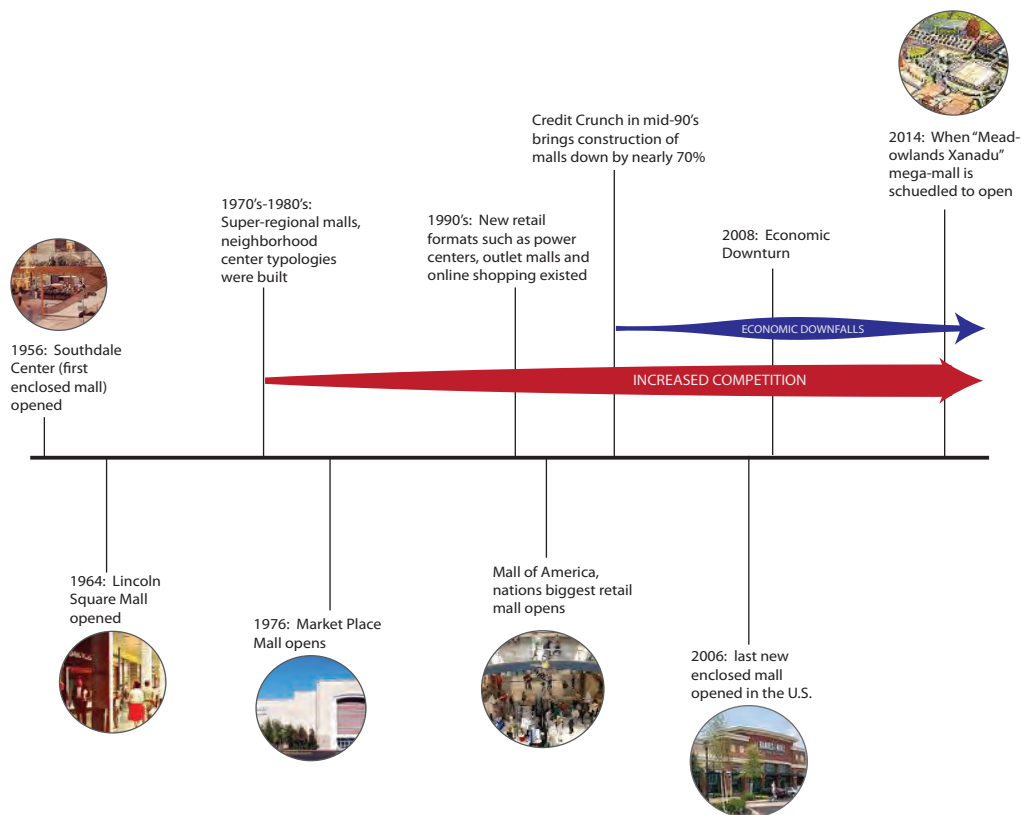


**Fig. 2.1** Diagram by author depicting number of dead malls per state. Information from International Council of Shopping Centers, ICSC (2009)



## Entropy

Dead malls, like many other types of obsolescent landscapes, are left to sit and decay. They pose no immediate danger to the surroundings and typically are buffered by other infrastructure, such as buildings and highways. In general, it is very difficult and expensive to physically erase these ruins, and even still they are part of a societies collective memory. Often times these sites look as if time has stood still, with little to no human involvement (Chung et al., 2001). The timeline below, Figure 2.2, shows depicts factors contributing to the decline of the shopping mall.



**Fig. 2.2** Timeline analyzing the decline of the Shopping Mall

### *Infrastructure Decay*

Given their size and footprint including the parking area it is unfortunate that most malls were built using cheap components and construction practices. The infrastructure requires a significant amount of maintenance. If the maintenance is deferred for extensive period of time, the atmospheric moisture enters and decay begins. This is pronounced in dead malls where the horizontally designed surfaces eventually fail due to expansive cracking and warping. A wide variety of problems that cause dilapidation include compaction, delamination, exposure, grooving, raveling, bleeding and alligatoring (ICSC, 1999).

### *Stagnation*

Shopping malls are controlled spaces in a constantly changing environment. The book Harvard Design School of Shopping suggests that,

Control and residual spaces are not separable, but rather, simultaneous and exchangeable. The urban is constantly recycled: the residual is periodically rescued from economic stagnation, while control spaces become subject to obsolescence and decline. Since control space is premised up the desire for flexibility and rapid transformation, the difference between control and residue is often so nominal as to be indistinguishable.

(Chung et al. 2001, 22-23)

This suggests that most control spaces eventually become obsolete. These places were not originally designed for temporary programming or flexible infrastructure. As a result such spaces were subject to decline in form and function, unable to adapt to the change.

## 2.2 'Metabolism' + 'Circulation' Theory

### *Metabolism Theory*

The concept of “metabolism” arose in the early 1800’s and was used to explain the relationship between material exchanges in the human body with respect to respiration. In 1857, this definition of metabolism was apparent in the writings of Jacob Moleschott, a Dutch physiologist and a researcher in dietetics. Another influential chemist during the 1850’s, Justus von Liebig, proclaimed that “metabolism” indicated the exchange of energy and substances between organisms and the environment. In his writings, “metabolism” also denoted the biochemical reactions in living things, such as material exchanges in the human body. Figure 2.3 is a timeline depicting the theorists and their theories related to metabolism and circulation.

Liebig, recognizing the sociological aspects of metabolism, understood “metabolism” in relation to the separation of spaces of production and spaces of consumption in relationship with urbanization. This theory he coined as “metabolic rift,” and recognized,

The pivotal causes for affecting (negatively) the productivity of agricultural land on the one hand and the problematic accumulation of excrement, sewage and garbage in the city on the other.

(Swyngedouw, 2006, 107)

From the point of urbanization, “metabolism” was an appropriate term revealing the relationship between the producers and consumers.

Labour is, first of all, a process between man and nature, a process by which man, through his own actions mediates, regulates, and controls the metabolism between himself and nature....Through this movement he acts upon external nature and changes it, and in this way he simultaneously changes his own nature...

(Marx, 1867, Sec. 1)

It was the well-known German philosopher Karl H. Marx (1818-1883) who was among the first to use the term “metabolism” in reference to the dynamics of socio-environmental change and human evolution. Within the notion of “metabolism,” “labour” is defined as the human metabolic relationship with nature during which actions of humans and non-humans alike are transformed. The evolving material inter-relationships between human beings and nature have been extensively studied within the ecological framework. Organisms do not simply adapt to their surroundings, but they also affect the environment in various ways (Swyngedouw, 2006).

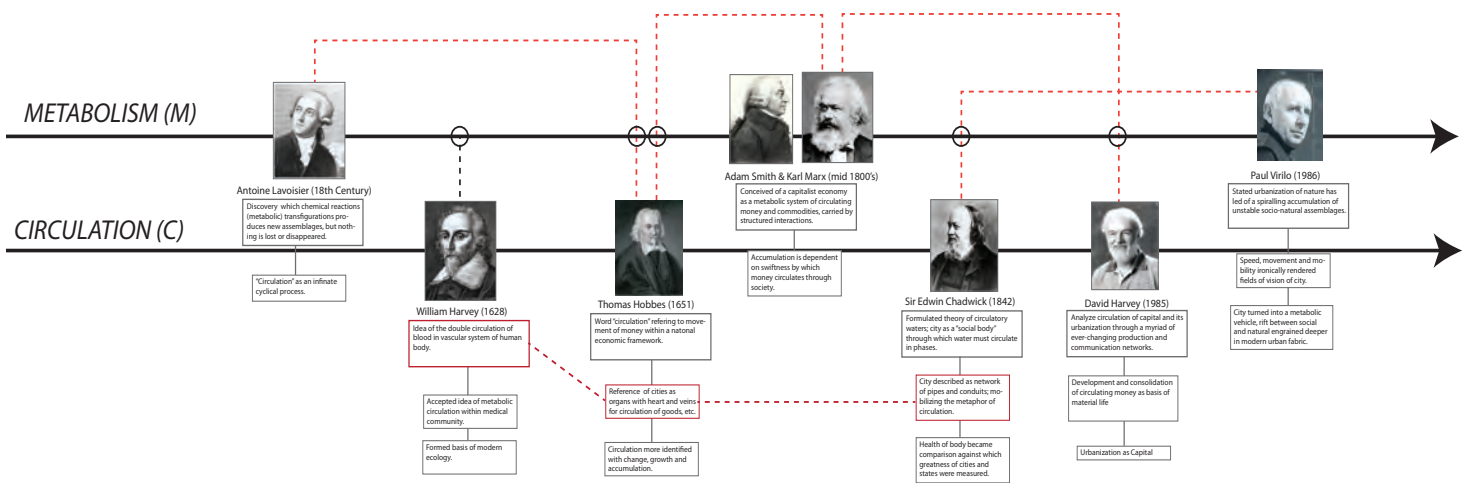
This phenomenon is noted as “metabolic interaction”. This term implies that as a result of such exchanges and transformations, the present material shares traits that are similar to that of its predecessors but also possesses traits that are altogether different. The ‘metabolic interaction’ is similar to the theory of evolution in which inherited characteristics change over successive generations.

### *‘Circulation’*

Significant to the “metabolism” theory is the notion of “circulation”. In 1628, William Harvey, an English physician, was the first to describe the movement of blood in the vascular system of the human body. During the seventeenth century,

“circulation” also began to describe the flow of money and goods within a national economy. Writing about economy began to include phrases such as “circulation of wealth” and “circulation of labor.” By the nineteenth century, scientific community increasingly accepted the idea of the circulation of chemical substances and organic matter within living organisms.

Walter Benjamin, a German literary critic and philosopher, had theorized that circulation existed within cities. Within his writings from 1892 the process of ‘circulation’ was less and less identified with a closed circular movement but rather was identified by the inputs and outputs of change, growth and accumulation that are localized within large urbanized areas. Thus, during the nineteenth century ‘circulation’ and the notion of ‘metabolism’ became the central metaphors in the effort to understand the process of socio-natural change and thus became known as “metabolic circulation” (Swyngedouw, 2006).



**Fig. 2.3** Timeline of the theorists and their theories: Metabolism and Circulation. Illustration by author, images from various online sources including Wikipedia

*'Metabolic Circulation'*

"Metabolic Circulation" can be described as,

The processes of socio -environmental transformation and trans-figuration through which all manner of materials are connected. They become fused together as the two central metaphors through which to capture processes of socio-natural change.

(Swyngedouw, 2006, 110)

"Metabolic circulation" is a process of destruction and creation. The process is a fusion in which 'heterogeneous assemblages' are characteristically similar to their predecessors and yet different. Both man-made constructions and natural phenomena are always heterogeneously constituted and are the product of metabolic circulatory processes. Thus "metabolism" and "circulation" describe the urban existence and its change over time.

In other words, environments are combined socio-physical constructions that are actively and historically produced, both in terms of social content and physical-environmental qualities. Whether we consider the making of urban parks, urban natural reserves or skyscrapers, they each contain and express fused socio-physical and techno-natural processes that contain and embody particular metabolic and social relations.

(Swyngedouw 2006, 118)

The geographer Eric Swyngedouw expresses that environments are products revealing the influences of human society and the natural resources. He recognized the fusion of human culture and tradition with ecological occurrences. Utilizing the metaphor of circulatory metabolism, Swyngedouw defines an environment by recognizing the dynamic flow and connections between social and natural. These socio-natural exchanges in obsolescence can result in new opportunities for existing

derelict sites. The dead mall typology has a life cycle with many factors and influences. Figure 2.4 depicts this dead mall life cycle in analytical detail.

### 2.3 Related Theories

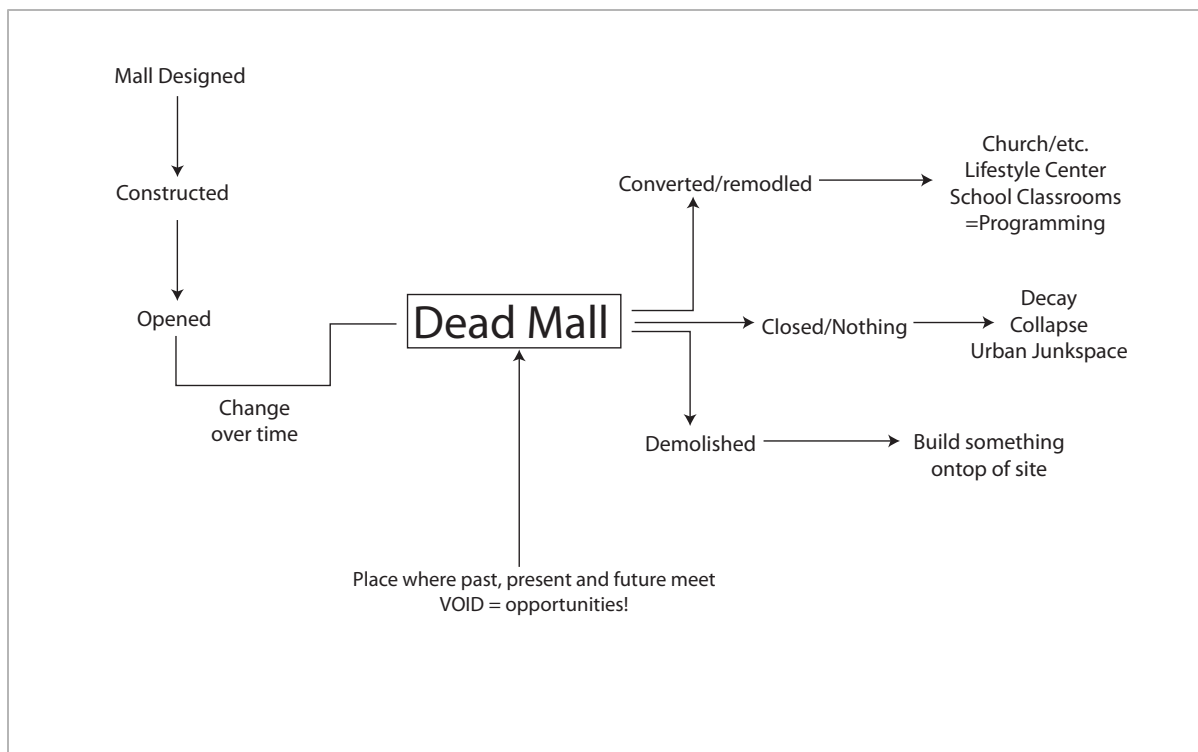
1) Ecological Urbanism is defined as urban recycling the remnants of an industrial city. This theory explores the need to view the destruction and fragility of the planet and its' resources as opportunities for speculative design innovations. Obsolescence falls under this theory and likewise should be viewed as an opportunity instead of an eyesore. "Imagining an urbanism that is other than the status quo requires a new sensibility- one that has the capacity to incorporate and accommodate the inherent conflicting conditions between ecology and urbanism. This is the territory of ecological urbanism" (Waldheim, 2006).

### 2.4 'Metabolic Circulation' Applied

The metabolism theory is used to understand the relationship between the socio-physical constructions and the dynamic structure of the surrounding environment. Obsolescence is a more natural occurrence that will happen in time. The rate of obsolescence is dependent upon the major factors of technology and socio-natural processes. This thesis design strategies too create opportunities from obsolescence, primarily focusing on the consumer landscape typology. Figure 2.4 depicts the life cycle analysis of a dead mall in similarity with the cycle of obsolescence. Strategies such as reuse and repurposing, up cycling, slipstreaming, remediation and reconstruction are will suited for obsolescent landscape typologies.

By applying these strategies to the dead mall typology, such strategies may be used with other forms of landscape obsolescence.

The built environment contains historical ruins of the past that are part of a larger social collective memory. The social collective memory persists even when the original structures are unrecognizable.



**Fig. 2.4** Diagram of Dead Mall Analysis, by author



## CHAPTER 3: DESIGN RESEARCH

The design research for the sample site includes six components: site description, site analysis, urban conditions, conceptual design, and gradual phasing and design details. The design strategies are applied to Lincoln Square Mall, a Dead Mall typology located in Urbana, IL. The author conducted multiple site visits and interviews with the General Manager of Lincoln Square Mall and also the City Planner for the City of Urbana.

### 3.1 Case Study – Lincoln Square Mall

Presently Lincoln Square Mall, located in the city-center of Urbana Illinois, is categorized as a 'Dead Mall' by the online mall rating website [DeadMalls.com](http://DeadMalls.com). The mall contains space for approximately 40 businesses. Currently there is one vacant store and more than three repurposed stores within the mall. The mall's clientele consists of mostly local residents.

The location of the mall was originally 9-city blocks consisting of housing and small businesses. The area is bounded by Illinois St. on the north, Race St. on the east, Elm Street on the south, and Vine St. on the west. This area was considered the city center of Urbana. The original mall concept, designed by Victor Gruen between 1962-1963, was derived from a redevelopment program intended to incorporate the mall as the community center. Lincoln Square Mall was heralded as an immediate success when it opened its doors in 1964.



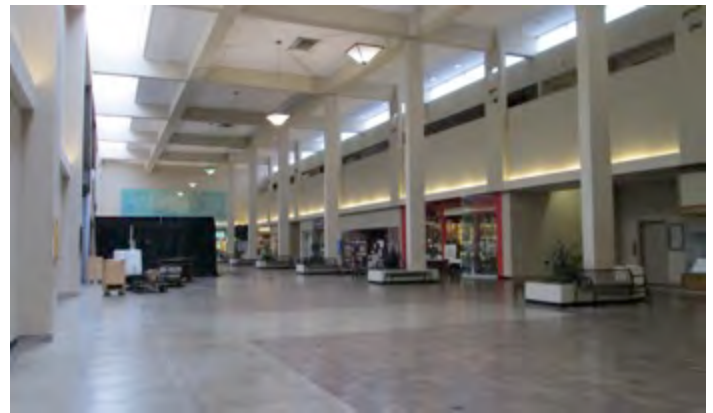
**Fig. 3.1** Area Site Plan

The mall was among the earliest enclosed-shopping malls to be built in the United States. It originally featured 274,000 square feet of retail space plus an open, light-filled,

climate-controlled central area that was intended to draw shoppers inside (Hardwick 2004). See Figure 3.1 (above). Moving from one store to another while still indoors was a new concept at that time. This innovation was made possible by large air-conditioning units that allowed for buildings without windows to maintain a comfortable temperature and circulate air.



A. 1960's



B. 2013

**Fig. 3.2** (A) An image of Lincoln Square Mall taken in the 1960's, URL: <http://www.mallsofamerica.blogspot.com/2006/03/lincoln-square-mall.html>; (B) Lincoln Square Mall image taken (by author) in 2013

The escalator was also incorporated into the mall's design as an easy way for shoppers to move from one level to the next in an open-space atmosphere. Upon its opening, Lincoln Square Mall had 49 stores and services (Icen, 1964). Images of the inside of the mall are shown in Figure 3.2. Originally forty-nine businesses offered a broad range of merchandise and services including: Carson Pirie Scott, Fidelity Union Life Insurance and the International Shade Tree Conference.

Shortly after the opening of Lincoln Square Mall in Urbana, Country Fair Mall opened in Champaign. At that time it was similar to the Lincoln Square Mall but also contained a grocery store and a movie theater. Both malls served as regional malls serving both the local residents and those from distant communities traveling to shop. The innovative regional mall, especially the enclosed, was successful due to its popularity with the consumers. There was a novelty of shopping in such shopping malls that enticed people. The reasons for such popularity included the mall's climate-controlled environment, availability of a wide variety of products, free parking, and available space for temporary programs and interactions.

### *Movement Toward Obsolescence*

In 1976 an additional regional mall, the Market Place Mall, opened their doors on North Neil St., in Champaign. It was a much larger mall and was designed to serve a wider audience than Lincoln Square Mall. Some of the anchor stores situated at Lincoln Square Mall moved to Market Place Mall, leaving behind unoccupied storefronts. These vacancies severely hurt the economic status of Lincoln Square Mall because former customers of the mall now shopped at Market

Place Mall. In 1999 the anchor store Bergner's closed its doors for good, leaving another vacant space in the then-struggling mall. Another factor contributing to the decline of Lincoln Square Mall was its lack of accessibility from the interstate highway system. The location of Lincoln Square Mall necessitated travel through residential areas on streets with several intersections and stop signs. Whereas, Market Place Mall is situated near an exit off of Interstate 74 making getting there much easier for shoppers. In the early 1990's, Lincoln Square Mall was deemed a "dead mall" and listed on the website deadmalls.com. Being listed on this website gave the mall a negative image among the members of the community and beyond; further reducing the number of businesses and customers.

Other factors in its decline include the rise of online shopping and customers' economic insecurity; thus, reductions in store availability and in customer patronage were major blows to Lincoln Square Mall. The original design strategies of Lincoln Square Mall were not forward-looking and resulted in creating a static environment, which the mall had limited ability to compete with the surroundings. Therefore, Lincoln Square Mall fell into obsolescence within the urban fabric.

### 3.2 Obsolescence into Opportunity

Over the past eight years Lincoln Square Mall made a transformation by turning obsolescence into opportunities. Refer to Figure 3.3. Many strategies have been implemented which have resulted in an increase in business at Lincoln Square Mall. Although it is still listed as a 'dead mall' on the website deadmalls.com, Lincoln Square Mall is no longer the struggling 'dead mall' as it was a decade ago. It is

dynamic and transparent, able to meet the ever-changing needs of the Urbana-Champaign community. Listed below are several strategies that are working to turn the malls' forms of obsolescence into opportunities.



**Fig. 3.3** Diagram by author of Programing at Lincoln Square Mall  
Programing includes: Middle Market, Naturalization Ceremony, Urbana Pops Orchestra, Market at the Square, Co-Op Grocery Store, Amara Yoga & Arts, Art Coop, Holiday Market, CU Pride Festival and the Boneyard Arts Festival

### *Local Investors/Owners*

In the early 2000's the City of Urbana prepared plans to redevelop Lincoln Square Mall, into a multi-use facility which would include spaces for 25 apartments and/or condominiums and for retail stores and service-oriented businesses. Unfortunately, this plan was discarded at the beginning stages of development. Later, an investor group of mostly Champaign-Urbana residents purchased the Lincoln Square Mall. The New Lincoln Square, LLC was formed and headed by a local appraiser and real estate investor, James H. Webster. Other investors included Peter Fox, founder of Fox Development Corporation, which had developed other shopping centers within the region. The local investors in Lincoln Square Mall helped to ensure that the money invested was going to stay in the local community.

### *Moving Away From Retail Consumerism*

The businesses at Lincoln Square Mall were unable to compete with the retail stores at the nearby Market Place Mall and online shopping. Therefore the solution developed was to attract alternative businesses into the mall. Soon after new ownership took control, the local health insurance company 'Health Alliance' moved into the space formerly occupied by Bergner's (a national retail chain). The basement and part of the first floor were then retrofitted into offices with the remaining escalator left in place. Health Alliance was able to retain and bring new business to Lincoln Square Mall and also contributing to the community.

One of the development goals for the Lincoln Square Mall was to become a 'Community Retail Center'. Some of the most successful tenants within the mall are

local businesses such as the Art Mart, International Galleries, the Co-Op Grocery Store and Charter Fitness. The opportunities enabled the mall to fulfill its potential as a viable center of the community and also continue to have a tenant composition mixed of national and local businesses. The strategy to transition to locally owned shops and businesses from large retail chains have been used in other repurposing projects involving obsolescent landscapes (Christensen, 2008).

On Aug. 29<sup>th</sup>, 2012, the author conducted an interview with Wade B. Franklin, general manager of Lincoln Square Mall. During the interview process, questions were asked pertaining to the current condition of the mall, plans for revitalization, business tenants and also future goals. Mr. Franklin was very quick to address the issues of Lincoln Square trying to change their image by renaming the mall as 'Lincoln Square' and the slogan "Same Square, New Angle". One of the strategies mentioned was creating temporary programming at the mall ensuring public awareness and community support. Mr. Franklin also mentioned that bringing in more local businesses to meet the needs of the community was one of the key components of the revitalization efforts (Franklin, 2012). When asked about Lincoln Square Mall being labeled as a 'Dead Mall' by the online community, the general manager said that they (the management) had made several attempts to take Lincoln Square Mall off the list of [deadmalls.com](http://deadmalls.com) for several years with little success. He mentioned that being listed on that website damaged the malls' reputation and is detrimental to the revival efforts of Lincoln Square Mall even though the mall is no longer struggling.



In early June, an interview was conducted with Rebecca Bird, Planner II for the City of Urbana. When asked what factors aided the revitalization of Lincoln Square Mall, Ms. Bird mentioned that the owners, tenants, University of Illinois and the City of Urbana all came together to formulate a planning process to revitalize the mall. The owner of the mall made plans for sections to become office space and also potential for residential space above those sections. She cited that the Common Ground Food Co-Op (Co-Op), which relocated to Lincoln Square Mall in 2010, helped to build a stronger connection with the farmers market and increase the level of foot traffic in the area. The local grocery store also feeds off of the popularity and success of the Farmers Market that occurs on weekends during the summer.

Another question asked was what is the role of temporary programming (farmers market, shows, etc.) at Lincoln Square Mall and how does it influence the local community? Ms. Bird was quick to point out that the programming that takes place on the site is not temporary but seasonal, happens year round or every week. No way it is temporary. This type of programming includes the Farmers Market, Middle Market and photography contests, etc. She also mentioned that these events are a draw people from all over Champaign County and is especially tourist attractions for students and parents. Ms. Bird mentioned several improvements that could be made to increase the success at Lincoln Square Mall (Bird, 2013). People do not feel like Lincoln Square Mall is downtown due to a logistical disconnect between the mall entrance on the North side and the area of Main St., located a block away. A solution to that would be to increase the signage around that area that can notify people in a friendly manner about being in the downtown area. Another

improvement would be to increase the interior to exterior transparency of the mall. The design of the mall, with full exterior brick façade with no windows to the inside, needs to be updated in order to attract more customers.

Lastly, when asked about the negative effects of Lincoln Square Mall being listed on Deadmalls.com, Ms. Bird mentioned that this website did not hurt the mall. What affected the mall was the fact that Lincoln Square Mall was an actual dead mall, but since the mid-2000's it has gone through a lot of changes to create opportunities from the obsolescence and is successful (Bird, 2013). This is opposite of the comments made by Mr. Franklin, general manager, who believed that being listed on the website was still negatively affecting business. Either way, the strategies applied at Lincoln Square Mall is making a positive affect on the local businesses and the surrounding community, despite still being negatively labeled as a "Dead Mall".

#### *Buy Local (Produce)*

In 2008 the Common-Ground Food Co-Op, a locally owned grocery store moved into Lincoln Square Mall. The Co-Op promotes local and organic production of fruits and vegetables and holds occasional cooking and educational classes. The Urbana population supports this grocery store and the store prospers by offering exactly what the community members want. This is a positive relationship that has aided in the revitalization of Lincoln Square Mall.

### *Lifestyle and Health Center*

Another strategy for developing the mall as a community center was the introduction of lifestyle and health centers. In 2005, Charter Fitness located to Lincoln Square Mall, providing the local community with easily accessible fitness center that is unique to the area. It is rumored that Charter Fitness received a major incentive to move into Lincoln Square Mall. The author was unable to find any direct evidence to support this claim.

During the same time period the Amara Arts & Yoga center also opened in the mall. Despite being one of four other yoga studios in the area, the Amara Arts & Yoga studio gained popularity among the community within a relatively short time.

The recent movement toward a lifestyle of actively pursuing good health has resulted in the patronage of these health-centered businesses. On any given evening at Lincoln Square Mall there is a multitude of individuals headed toward the fitness center or the yoga studio.

### *Seasonal and Adaptable Programming*

The new ownership of Lincoln Square Mall promoted a vision of the mall serving as a multi-dimensional community center. It is a place where local community members could gather, shop, exercise and work. This vision led to the idea and fruition of a seasonal public farmers' market, called the "Farmers' Market at the Square." The Farmers Market brings people together in search of fresh produce, baked goods, flowers and hand-made arts and crafts. It is a temporary event located in the mall parking lot every Saturday from May to November. In the

winter months the Farmers' Market moves indoors to the atrium area of Lincoln Square Mall. Many community members are eager to attend the Farmer's Market. The mall's parking lot was nearly vacant on Saturday morning; the Farmer's Market filled a niche in an available space. This event is an example of how such voids can be metabolized into new forms and functions. Lincoln Square Mall also hosts other types of temporary events such as antique shows, health fairs, holiday events, art and photography displays and more. Such events bring people to the mall; the revenue generated may not be great but the sense of community definitely makes the place feel successful.

Investors saw the obsolescence at Lincoln Square Mall as an opportunity. When the mall was most vulnerable with few tenants and low consumer usage; the mall was poised to be revitalized with creative strategies. To avoid relapse into obsolescence, the Lincoln Square Mall owners must consider looking at both the infrastructure and the surrounding community when exploring the opportunities.

### 3.3 Exploratory Design Strategies

#### *The Process*

The process of diagramming several design strategies and researching local history was an important part of the thesis process. This process helped the author construct a better knowledge base pertaining to obsolescence and the possible opportunities created through strategic design. The strategic designs were evaluated by their real possibilities on Lincoln Square Mall in the future. The evaluation included natural and economic values when applied to the site.

Lincoln Square Mall is an example of a revived dead mall. Its resurrection is due to presently apt and valid design strategies incorporated into the urban context. Through circular metabolism what once was a static landscape is currently in the process of becoming adaptable and engaging through various strategies.

### *Diagramming the Possibilities*

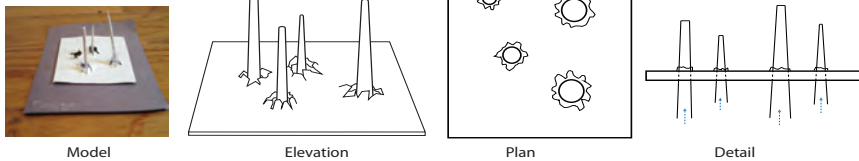
Several new forms of design strategies, which can serve as catalysts for regenerative forms and functions were developed during the thesis process. A series of visual exploration techniques were used to diagram the possible opportunities available to a Lincoln Square Mall of the future. Four of these exploratory strategies are depicted on Figure 3.4 and exploratory sketches are shown on Figure 3.5. Each idea was quickly sketched out on trace paper; creating 88 total sketches. These sketches were used for exploring the possibilities of the site. They served as a method of brainstorming the various possibilities of the site. The diagrams needed to show some degree of dynamic flexibility. The solutions need the ability to change over time from one program element to the next while still retaining a portion of the previous arrangement. Such brainstorming produces a better understanding of obsolescence and the transformation into opportunities.

### *Connecting the Diagrams*

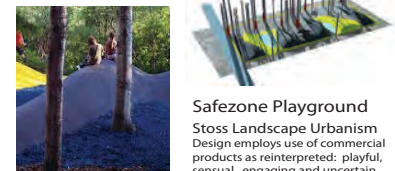
In order to recognize a sequence, the author used string to connect the diagrams together as a series of phases over a length of time as depicted in Figure 3.4 and 3.5. Some design concepts within the diagrams contained aspects that

allowed for connections to other diagrams. These concepts were evaluated and then chosen as the top strategies that could be applied to a site with similar qualities of obsolescence. The phasing sequencing reinforced the idea of using the circular metabolism theory to produce new forms and functions. The top strategies included those that were titled “Implosion, Materials Testing, Air Filtration System” and “The Void”.

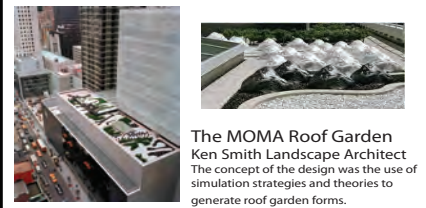
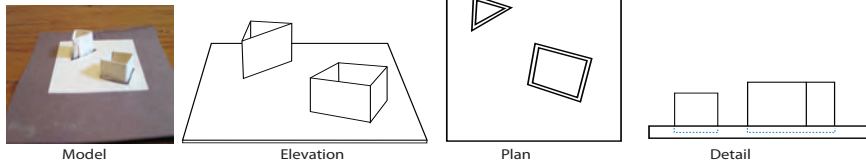
### Emerge



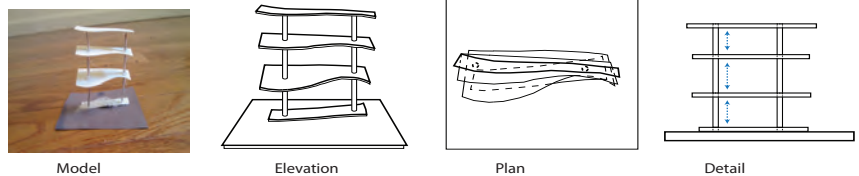
### Precedents



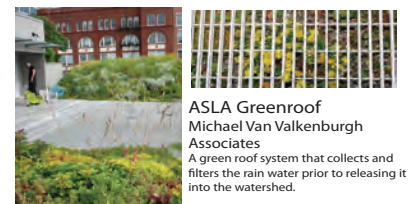
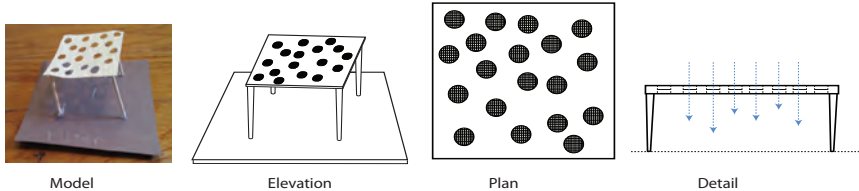
### Plug-In



### Stratify



### Filter



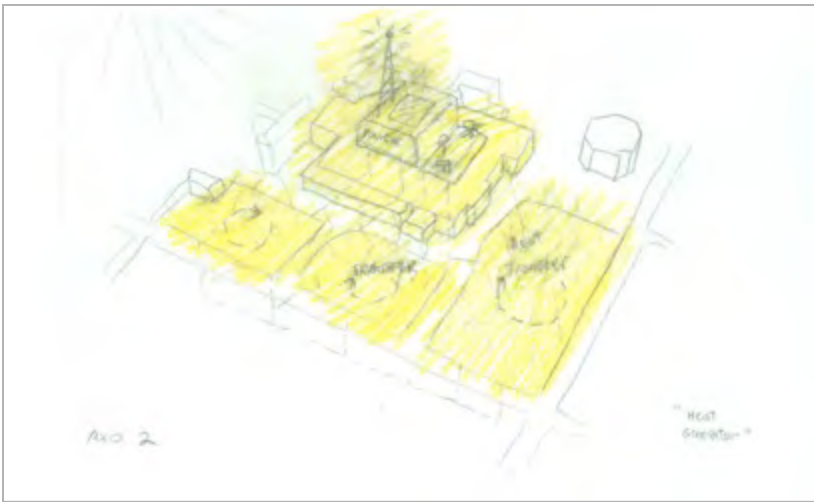
**Fig. 3.4** Example of exploratory strategy modeling: Emerge, Plug-In, Stratify and Filter. Precedents include Safezone Playground by Stoss Landscape Urbanism; URL: <http://www.landscapeandurbanism.blogspot.com/2008/08/curvy-playscapes.html>, The MOMA Roof Garden by Ken Smith Landscape Architect; URL: <http://www.asla.org/2009awards/050.html>; La Tour Vivante by SOA Architects, URL: [www.atelier.soa](http://www.atelier.soa); ASLA Greenroof by Michael Van Valkenburgh; URL: <http://www.mvvainc.com/project.php?id=16>

## DESIGN STRATEGIES: ITERATIONS + EXPLORATIONS



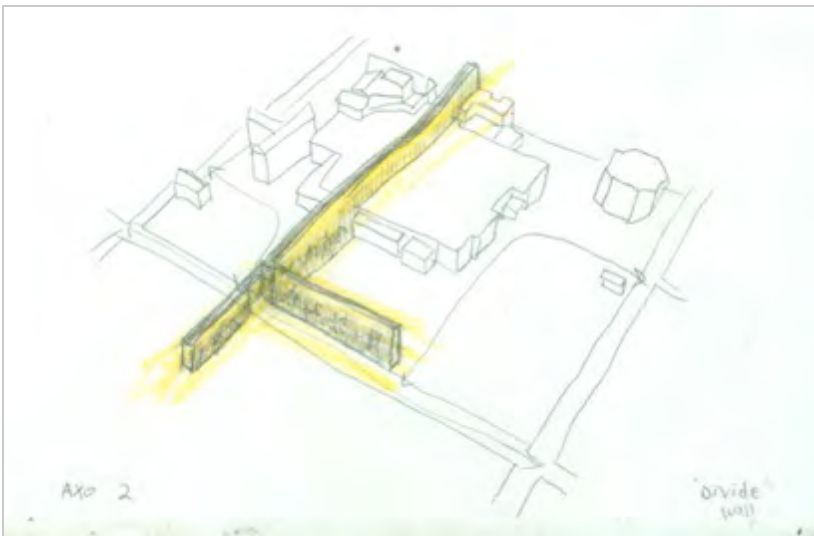
**Fig. 3.5** Design Strategies: Iterations and Exploration sketches. The ability to generate design strategies became apparent when continuing this sketching exercise





**Fig. 3.6 “Heat Generator”**

The heat/energy generated from the impervious surfaces such as the infrastructure and parking is harvested as energy and turned into ‘heat generators’. The electricity generated can be used as an emergency backup for the community during dangerous situations such as power-outages



**Fig. 3.7 “Divide Wall”**

The divide wall separates sections of the building and also parking lot. The purpose of the divide wall is to be a medium material for local artists and the community. A wall used for self-expression, artists can paint, graffiti, and reclaim obsolescence to turn it into opportunity. The wall can also become a green-wall with plant materials planted within the frame

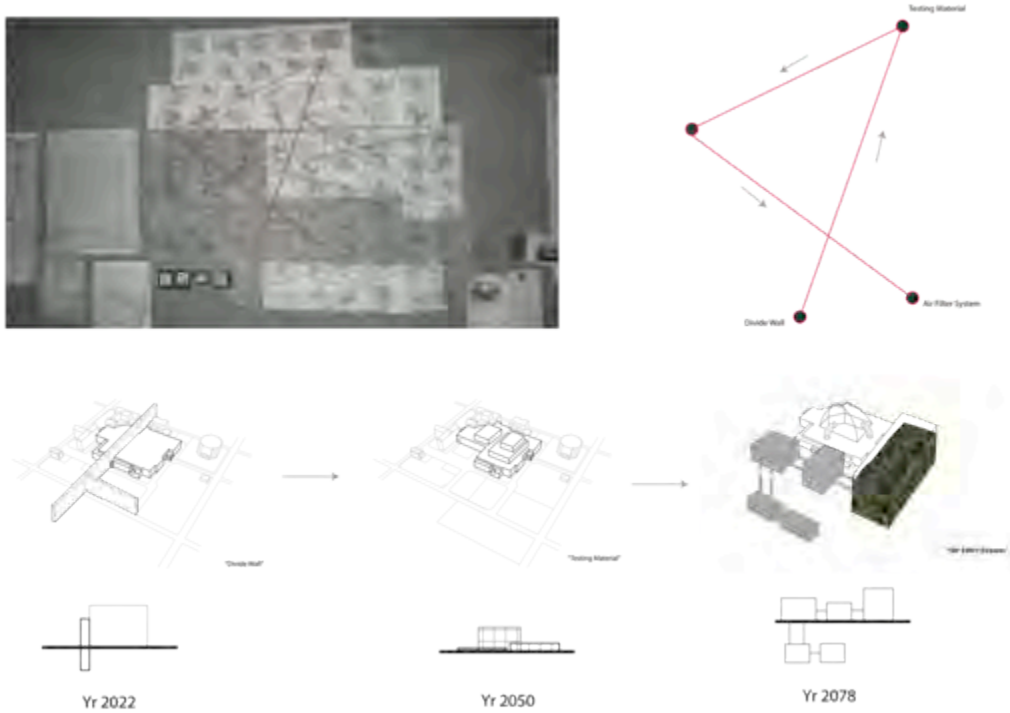


**Fig. 3.8 “Canyon”**

Sketch is of the possible future of Lincoln Square Mall in which the landscape has become a canyon-like, similar to that in an Indiana Jones movie. The only way to access the Mall is by footbridge, one on the south and the east sides of the canyon. Thus, Lincoln Square Mall has become a place of more mystery and perhaps dangerous for most community members. However, it might bring more tourism to the community with a ‘Canyon’ in the middle-of the town



**Fig. 3.9** Sketches on wall showing process between sketches and analyzing them through connections by string method



**Fig. 3.10** Connecting the sketches with string, shows connections between them, processed over period of time (fictional development)

### *Historic Phases of Obsolescence*

Research into the historic references of metabolic circulation and obsolescence in the Champaign-Urbana area resulted in a better understanding of why Lincoln Square Mall was designed and constructed during the 1960's and what were the major influences leading up to that period.

Originally there was the town of Urbana and West Urbana (re-named Champaign) In 1854, the Illinois Central Railroad was built and traveled directly through West Urbana. This in turn caused several businesses from Urbana to relocate to West Urbana. The railroad greatly boosted Champaign's' economy because this allowed for the transportation of goods and services to be more accessible to the community, while leaving Urbana inaccessible until the development of the Inter-Urban line which ran between the two towns (McGinty, 2007).

In 1868 the Illinois Industrial University, located between Champaign and Urbana, opened with 77 students. The University of Illinois has been an economic generator for both towns by producing local jobs and attracting students. As the University grew, Champaign tried to extend its' borders to claim the University. However, Urbana would put a stop to that and eventually the University would be residing half in Urbana and half in Champaign (McGinty, 2007). Figure 3.9 depicts the growth of Urbana and Champaign from 1887 to 1951. Also, a historic timeline that lists the major influences of such growth is in Figure 3.10.

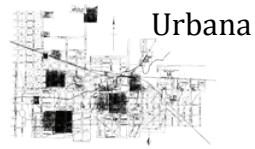
Lastly, in 1964, plans were called for a revitalization of the downtown of Urbana. The city hired well-known architect Victor Gruen to conduct a site analysis

and design of a 'community center' that would help revive the area. Lincoln Square Mall revitalized the downtown area of Urbana. The thirteen square blocks of residential buildings and small businesses, which had made up the downtown was demolished to make way for the Lincoln Square Mall. Some of the remnants and debris from that construction were then dumped in Busey Woods, the last remaining woods from the original 'Big Grove' where the first settlers had arrived (Schneider, 2012).

Each historic development had an affect on the surrounding community that was both positive and negative. Figure 3.8 depicts a visual representation of the historical markers. Urbana lost businesses with the introduction of the railroad, while Champaign had an exponential growth spurt. Lincoln Square Mall may have revived downtown Urbana, but many homes were destroyed as part of the process and the nearest woods became a dumping site for the debris. This shows that there is always a positive and negative aspect pertaining to metabolic circulation and obsolescence.

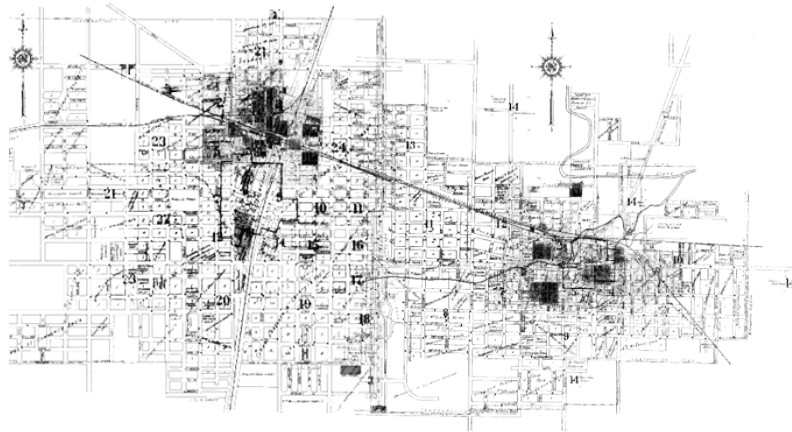


**Fig. 3.11** Montage by author depicting a visual representation of the historical markers in the vicinity of Champaign, UIUC and Urbana



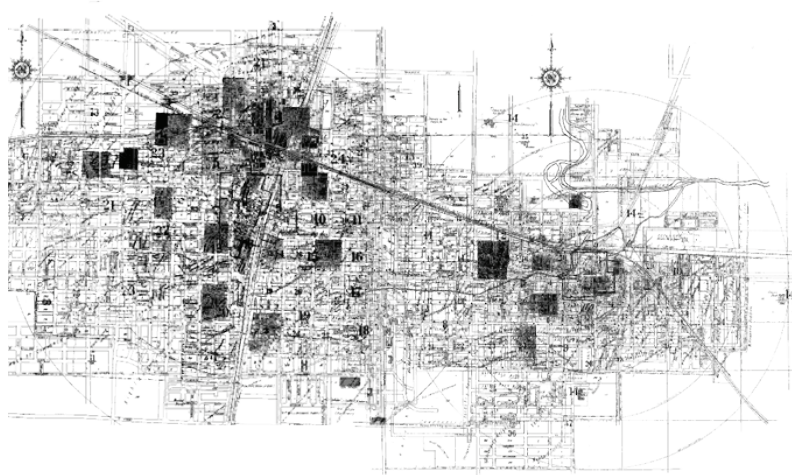
1887

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1915

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1924-1951

**Fig. 3.12** Maps depicting growth of Champaign and Urbana from 1887 to 1951. Maps taken from the Digital Sanborn Maps collection online <http://sanborn.umi.com>





### 3.4 Applied Strategy – Vertical Farming

Metabolism is centered on matter being constantly dynamic. It is always in motion and also moving in and out of the periphery (Swyngedouw, 2006). This also is true when implementing design strategies to any site or location. For example one of the strategies is to construct and attach a Vertical Farm to the infrastructure of Lincoln Square Mall. The Vertical Farm would be designed to produce food year-round. However, this cannot be constructed all at once. Major construction is cost prohibitive, the Vertical Farm would be constructed through a series of phasing. Phasing allows for gradual construction and time to gauge interest and support from the local community. Opportunities stem from obsolescence, which can change over time and is depicted in this thesis as a series of phasing on the Lincoln Square Mall site. According to [verticalfarm.com](http://verticalfarm.com), approximately 80% of the population will reside in urban centers and the human population is expected to increase 3 billion people by 2050. There will not be enough land to grow food to feed the ever-growing population, which makes Vertical Farming an optimum opportunity. This is especially true in Urbana, where the population is expected to increase and the local farmers crops that are not for human consumption. Also, it is projected that fewer individuals will be driving vehicles due to rising gas prices and other modes of transportation will become increasingly popular. The parking lots will as a result become obsolete and design strategies can turn this into opportunities, such as construction and implementation of a vertical farm. (Vertical Farm Project).

If successfully implemented, they offer the promise of urban renewal, sustainable production of a safe and varied food supply (year-round crop production), and







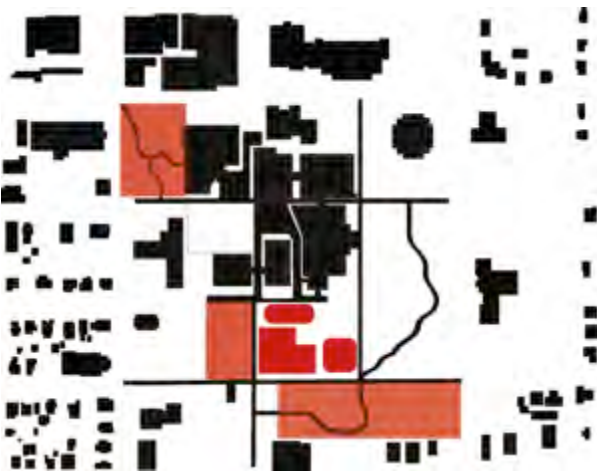
### Phase 1

- Infrastructure is divided
- Skyways constructed to connect buildings
- Greenhouses built on site
- Pedestrian and Bicyclist bridges
- Pavement removed and void space s



### Phase 2

- Empty lot planted with tree species
- Section of Race St. & Vine St. is closed to vehicular traffic
- Waste and Compost Recycling built on site
- Electric Generator for public is constructed on site



### Phase 3

- Urban Air Research & Education facility Constructed in parking lot
- Materials and Research section added to site where materials are removed and recycled
- Air filtration system is extended: concrete removed and soil amended with successional plants
- Parking lot of Lincoln Hotel removed, soil amended, successional plantings

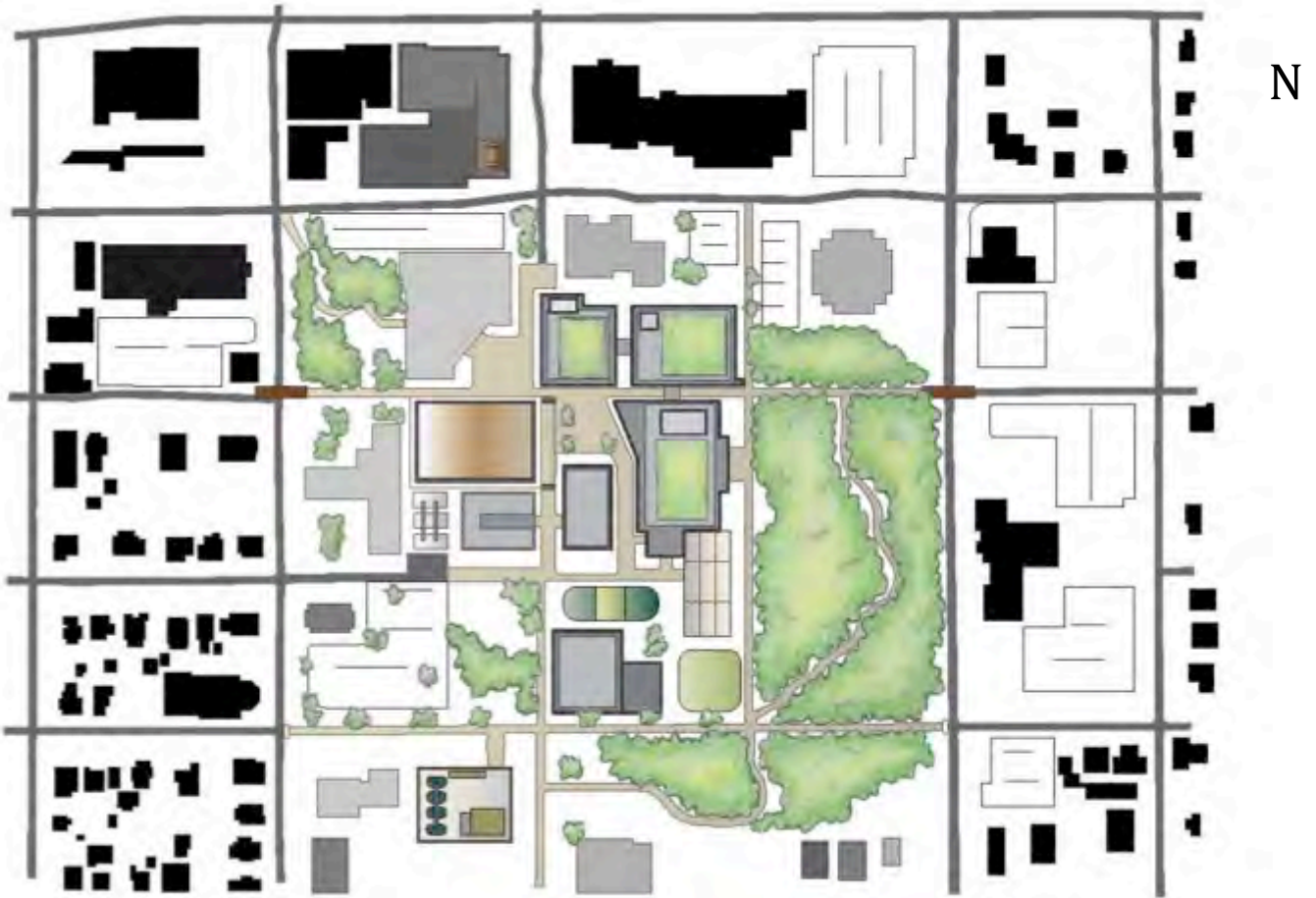


### Phase 4

- Trees planted in tree filter extension lot, some successional plantings removed
- Open lot near Lincoln Hotel planted with trees, created urban park
- Green roofs added on existing infrastructure
- 2<sup>nd</sup> flood of neighboring parking garage converted into outdoor performance space, outlook tower added
- Vertical farm completed

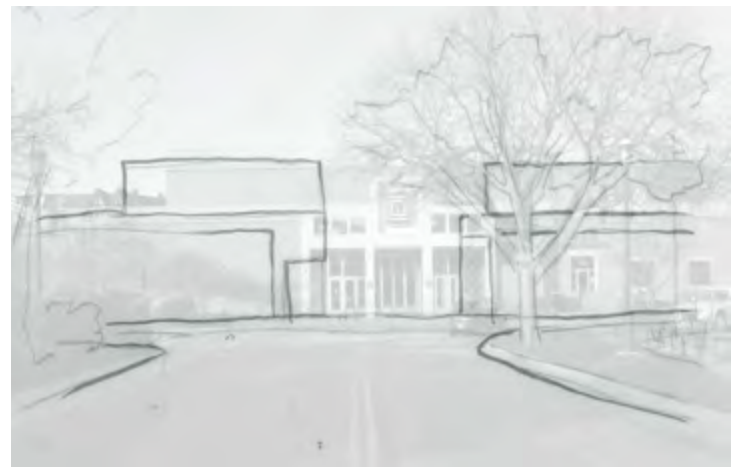
**Fig. 3.15** Phasing Plan

As part of the design process, a phasing plan was developed to show how obsolescence could create opportunity over a period of time. Each phase spans a period of twenty years. Parking lots turned to public parks, infrastructure divided into smaller buildings and sections of road transformed into pedestrian and bicycle pathways are all part of the phasing process



**Fig. 3.16** Plan (Phase 4 Completion)

New forms and functions have been generated through metabolizing obsolescence at Lincoln Square Mall. After phasing, the parking lots are public green spaces and the mall infrastructure has been divided into separate entities to create new forms and functions. Lincoln Square Mall is still a part of the social collective memory and is still regarded by the community as the downtown center of Urbana, IL



**Fig. 3.17** Plan

Site Sketches after phasing has taken place. Left is a sketch of the public park (formerly a parking lot). The sketch on the right is of the main entrance to the Lincoln Square Mall after divided into separate buildings, creating more space for programming and application of design strategies



**Fig. 3.18** The Lincoln Square Mall plans in respect to the surrounding area after all four phases of the design process are completed

The strategies applied to Lincoln Square Mall during the design process in this thesis represent some of the possible opportunities created through obsolescence. This is referenced in Figure 3.18 (above). The qualities of obsolescence such as void space, changes in form and function along with the strong ties to the social collective memory make obsolescent landscapes unquestionably



unique. Thus, obsolescence can be viewed as catalysts for change. Figure 3.19 and Figure 3.20 are perspectives, generated by the author, of the Vertical Farm potentially located at Lincoln Square Mall as part of the design strategies applied to the site.



**Fig. 3.19** Inside the Vertical Farm at Lincoln Square Mall



**Fig. 3.20** Futuristic image of Lincoln Square Mall, greenhouse in the background

## CHAPTER 4: CONCLUSION

### 4.1 Results & Significance

#### *Projected Findings + Outcome*

The traditional mall design of the 1950's and 1960's, with the oceans of parking lots and repetitive chain stores, cannot compete with the more contemporary counterparts such as catalogue and internet shopping and big-box retail. In the smaller towns, such as Urbana, these Victor Gruen-style malls tend to generate little revenue while taking up a great amount of space (Techentin, 2004, 6).

The Lincoln Square Mall makeover was successful because it addressed the needs of the surrounding community. Businesses such as the Co-Op, Charter Fitness and Amara Yoga and Arts have been successful tenants at the mall in terms of foot traffic and economic revenue. Seasonal programming such as the Farmer's Market and Middle Market have turned the mall into a community center, which is what designer Victor Gruen had originally intended for Lincoln Square Mall.

Individuals from varying fields were involved in the strategic planning which included urban planners, managers, landscape architects and architects, engineers, politicians and most importantly community members.

Lincoln Square Mall is community driven and once again connected to the urban fabric. People are coming to the mall not only to shop but also for the aesthetic and social experiences. This mall is successfully transitioning away from a state of obsolescence into a state of dynamic opportunities through strategic design. This shift came from the realization that permanent boundaries and a static environment cannot define such spaces, especially over long periods of time. In the

book *Dead Malls*, edited by Warren Techentin of the Los Angeles forum for architecture and urban design, identifies the factors that contribute to dead malls and what strategies can be applied to create opportunities from obsolescence. In the book he states,

Malls are too market driven, single-minded,  
disconnected from the urban fabric and poorly managed.  
They require flexibility and change to allow them to  
adapt to the life going on around them all the time.

(Techentin, 2004, 10)

The thesis objective was to integrate the notion of ‘metabolizing obsolescence’ using strategic designs to create new opportunities in both form and function in these types of ‘Dead Mall’ landscapes. The exploration into the different types of obsolescence contributed to a broader knowledge base. Factors such as time, technology and social-natural changes all contribute to products becoming discarded and landscapes being abandoned. While these landscapes are generally viewed as ‘eyesores’ with decaying infrastructure and over growth, this thesis explored strategies that could be used to catalyze obsolescence into positive change.

During the thesis process, the author was inspired from several researched design strategies that were applied to other similar sites. Those case studies showed that design strategies could be innovative and effective when creating opportunities from obsolescence. Those discoveries motivated the author to develop creative design strategies that can be applied to Lincoln Square Mall and used with other forms of landscape obsolescence.

The next steps would be to apply one of the documented exploratory design strategies to other types of obsolescent sites. Emphasis on the factors that control

the physical environment and social collective memory would be integrated into the design process. The field of Landscape Architecture is a very important part of the puzzle when determining the design strategies that can apply to obsolescence landscapes, including consumer landscapes.

### *Potential Impacts*

The potential impacts of this thesis can reach a multitude of different disciplines. Most importantly are the owners of such landscapes who can review the design strategies and assess how they can be applied to their sites and what of the potential impacts. Others could use the regeneration of Lincoln Square Mall as an example of what strategies work with obsolescence among the consumer landscapes.

### *Dissemination*

This thesis could be a guide for architects, engineers and planners who are searching for design strategies in regards to obsolescence. The intention would be to publish the results in professional journals such as the American Society of Landscape Architecture (ASLA) or the American Planning Association (APA). Also give public presentations on this subject as conferences and workshops on the subject of obsolescence and their potential for new forms and functions.

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