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Redeveloping Urban Brownfields: Integrating “Creative Class” Neighborhoods Near City Centers

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[ Redeveloping Urban Brownfields::Integrating "Creative Class"

Neighborhoods near City Centers ]

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[Abstract]

Many cities once known for their thriving industrial cores are now left with only brownfields. With many of these areas having prime location, often being nestled near downtowns and transportation routes, they can become a destination for the emerging "creative class" via new live/work communities. These redevelopments can seek to reverse urban decay and suburban flight by catering to today's large population of young professionals, and these former derelict sites can once again bring vitality, youth, and economy back to the American city center. Using a site in Milwaukee as my study area, I will begin by researching brownfield remediation strategies as well as "urban village" precedents. This will then lead into several areas of the project being designed in detail, with "social spaces" being the key. Upon implementation of this thesis, this site can once again become a unique area in the city of Milwaukee.
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In the United States there is more space where nobody is than where anybody is. That is what makes America what it is.  
- Gertrude Stein
[Thesis_Proposal]

[A::introduction] Many Midwestern cities, once known for their thriving industrial cores and supporting residential neighborhoods, now contain only brownfields where their manufacturing plants used to be. Most of these industry fragments have weathered time and remain as decaying scrap heaps on the landscape, and as chilling reminders of the city’s lack of progress. As the years compound, investors and city officials become more and more weary of pumping a lot of money into an area that they fear may not turn a profit due to its forgotten decades and relative dormancy. Attempts that cities put forth in these areas are generally lacking in vision, funds, or any definite timeline (Rafson 94).

Industrial flight from urban cores to exurban areas has been occurring since the invention of the American interstate system in the 1950s. Other reasons for this aforementioned flight include: obsolescence of the factories, lack of interest in rail transport, multiple types of severe pollution, lack of attention paid to changes occurring in the city, shrinking demand, and lack
of skilled labor in these fields (MVP 4). Many of these areas that were once surrounded by residential neighborhoods full of character and ethnic enclaves are now slums because of rock-bottom property values and the area's lack of any literal connection to the city, both physically and economically. However, many abandoned manufacturing parcels do have prime location potential, often being nestled near downtowns, waterways, transportation routes, and the previously mentioned deteriorating residential neighborhoods.

The major argument I am putting forth in this thesis is that these brownfields have a major opportunity to become destinations for a prominent class comprised of young professionals with the implementing of new live/work communities. These broad-scaled brownfield redevelopments can reverse urban decay and suburban flight by catering to a large population of technologically-skilled, open-minded, culturally-driven, hard-working young professionals (Florida 68). Formerly derelict sites have the potential to once again bring vitality, youth, and economy back to the American city center. This can be achieved through
identifying current market trends and architectural design solutions for contemporary “creative class” neighborhoods centered on large research parks, such as the ones in Austin TX, Silicon Valley CA, and the Pearl District in Portland (Florida 32).

I will be using the Menomonee Valley in Milwaukee WI as my site of study. The Valley is a very large area in Milwaukee that physically, visually, and socially divides the city and has been a major area of concern in the city since the early 1960s when businesses started to leave. Minimal efforts have been made in the area, such as the creation of an Indian casino, a new baseball stadium on the far west end, and dropping many of the bridges that used to pass above the site down to grade. However, much still needs to be done in terms of development, public acceptance, and site cleanup. The Menomonee Valley is an untapped resource that spans well over 40 acres, and has the potential to be an astounding gateway connecting Milwaukee’s residential neighborhoods to/with the downtown/universities. It fronts water on three sides, contains several operational rail lines, and also major
roads, and is primed for development due to increasing municipal interest in the site during the past decade.

I will begin this project by researching unique ways to decontaminate in such a way to get citizens excited and involved in the process and potential for future development (as in Landscape Park Duisburg-Nord). A general site plan of the area will follow, based upon Richard Florida's writings, the works of Allen Jacobs, and any other relevant authors I can find. Several areas of the project that will be designed in detail include: typical streetscapes, a large research facility, parkland/open space plans, an intermodal transit hub, canal character sketches, and zoning/site plans. Upon implementation of this proposal, I hope that my thesis will have shown that the Menomonee Valley can once again become one of the major employment hubs in the Midwest by becoming a new live/work destination, replacing its working class of fifty years ago with a new "creative class" to propel Milwaukee into the future. In my particular case, I hope to specifically capitalize on Milwaukee's large flight of young single adults to downtown condos and the
presence of three major technology and research-oriented schools nearby to provide a residential base for this "new" class. My thesis will hopefully inspire other cities with similar afflictions to use Milwaukee's example as a testament to what hard work and effective planning can achieve on an urban brownfield site.

Following this introduction, the remainder of this document will delve into the key components of the project in more detail. An analysis of the problem statement will be given. This will be followed by in-depth literature and precedent analyses on materials and projects found to date that are significantly relevant to this topic. A summary of these analyses and how they seek to resolve the aforementioned problem statement will result in a succinct hypothesis that my thesis seeks to sustain and develop. The document will conclude with a brief methodology of concepts I wish to study and a working design schedule, a site and program overview, and lastly a bibliography of research I wish to conduct throughout the length of my thesis year.
A major problem in America today, particularly in the Midwest, is the neglect of former industrial land in major and/or former manufacturing powerhouse cities (Kirkwood 2). This has happened over a long period of time and has been caused by a large number of reasons. First, a substantial number of corporations that owned a lot of these factories took the easy way out and abandoned the property, rather than invest in repairs and technological advances. Second, while these manufacturing hubs became increasingly disregarded, economic pressures forced more and more businesses to relocate to the periphery of cities, marking the beginning of America’s first wave of “suburban flight.” Third, large amounts of exurban land at low costs, the prevalence of the automobile, and the lack of interest in rail transport meant that businesses no longer needed the urban city center to thrive (Wright 80).

New businesses have evolved into the community centers of new self-sustained towns and suburbs. As a result, old urban factories relocated to

Pabst Brewing Company in Milwaukee, Ca. 1900s

Suburbia USA
the outskirts, and city centers became increasingly deserted, neglected, and polluted. Today these vacated lands remain as eyesores and unrealized opportunities for development in many cases. In contrast, working-class cores were once the nucleus of cities such as Milwaukee, Cincinnati, Chicago, and Duluth. The greatest tragedy is that much abandoned industrial land is often in or near the downtown hub of a city, and for a multitude of reasons, these lands have remained underutilized and extremely polluted for many years.

Lack of attention on the shifting infrastructure of the city has led us to the formation of slums around these old industrial zones. Gentrification is often seen as “too drastic,” but at the same time low-income housing is not necessarily desired near the downtown either, nor is a heavy infusion of big-box retail, stadiums, and entertainment that are not necessarily the best economic generators (LeRoy 159). This is the ongoing debate in every major American industrial city, and beyond all the propaganda, decaying structures and polluted landscapes linger as a permanent reminder of the past (Simons 7).
It is crucial to realize the potential that these neglected industrial brownfields possess, and these factors emphasize the importance of this thesis. The combination of a fragile ecosystem, a dormant history, and downtown proximity provides a challenging yet exciting opportunity for these lands to prosper as a unique environment that combines the activity of a downtown with the comfort of a community. These lands have major possibility because each new neighborhood created amongst them can have varying degrees of inclusion of citizens, seclusion from the city, and historical reference.

America’s growing interest in public transportation and city identity makes social investment and economic redevelopment in these regions a priority (Simons 10). All of this plays perfectly into the hands of the architect and the urban planner, because there are no “rules” or boundaries for any one specific brownfield redevelopment. Each area has a chance to serve as its own beacon, gateway, and “calling card” to put its respective city on the map. If there is any common ground between pioneering examples in
cultural redevelopment of derelict sites, it is that design strategy, zoning, phasing, and public acceptance all played a large role in their success (Kirkwood 5), and it can therefore be assumed that it should be no different on my site in Milwaukee. My site will reference such large-scale urban brownfield projects as Atlantic Station in Atlanta GA, the Pearl District in Portland OR, Olympic Village in Sydney, and Landscape Park Duisburg-Nord in Germany. Various urban cultural communities/interventions outlined by Richard Florida, the “third place” concept of Ray Oldenburg, and the idea of “urban village” (Sucher etc.) are also key elements in this equation.

[B2::literature_review] The burden of the American city to reclaim brownfield sites has become an increasingly vital issue over the past five years, due in large part to new federal legislation, a renewed public interest in environmental protection, and lastly a nationwide push by local governments to get citizens moving back into the heart of the city. The United States currently contains over 500,000 brownfield sites (Simons 2). These sites are coveted today for
the same reasons that their inner city locations originally prospered; they generally have immediate proximity to multiple modes of transportation, and they also usually provide easy access for supply and customers. In examining how to attack the problem of a derelict industrial site, there are four key issues I am proposing that will be discussed chronologically in this review: (1) how to clean up the site and deal with any existing infrastructure; (2) how to rehabilitate its former habitat and landscape; (3) how to appropriately redevelop the site on a case-by-case basis; (4) taking advantage of the growing “creative class” as the market for these near-urban neighborhoods.

Whether or not a site is worth decontaminating is the first issue that always surfaces in regard to brownfields. Gaining public support is something that is essential. It is sometimes hard for taxpayers to see beyond the cleanup costs and the misconceptions of high crime and undereducated workers near the site (Simons 56). Most of the time, the benefit to cleaning up a site for economic development is great, because
brownfields are generally large in size and close to downtown (Kirkwood 140).

However, it is also meritless to decontaminate hundreds of acres if there are not enough projects to fill that space; thus, a redevelopment plan must be in place before cleanup efforts ensue to determine how much should be cleaned, and how much should be capped off (Gans 12). A general strategy employed in many instances is to leave some remaining industrial infrastructure “to the elements” and detached from the new development, and to clean up the rest for future use (Gans 14). The counter-response to this technique would be to gut out the entire area and plant various types of vegetation to break down the contaminants over time in order to facilitate future growth in phases (Kirkwood 99). Both seem to be valid choices depending on municipal cooperation. The former choice would provide a lot of character and social benefits for the site through the interaction with industrial artifacts, but the latter would seem to be more feasible from a sustainability and economic point of view.

This leads to a major idea brought up by Kirkwood: there are generally two
types of brownfield rehabilitation. One involves a visual and ecological integration of the site into the landscape, and restoring the ecosystem where it has been damaged. This approach would be more conducive to historical references, and could prove to be a symbol to the citizens that the city has learned from its mistakes and is looking towards recapturing the former glory of that site in a unique way. This approach also represents the idea that human interactions with the site in the past are a part of nature, just as the natural processes are.

Landscape Park Duisburg-Nord, Crissy Field, Chimney Park (unbuilt), and Salsburg Park are all testaments to this approach (Kirkwood 102).

The second type of rehabilitation would be the opposite - rather than a harmony with nature, this approach looks to underscore human intervention by revealing the “hand of the designer.” History would be alluded to in this method, but not necessarily restored. This is a bolder strategy in which the city would be looking to “start over with a clean slate.” Most of the time when this technique is employed, one would see a major architectural/planning
intervention involving the creation of a new community with sustainable design kept in high regard, such as the Olympic Village in Sydney. From current trends, this seems to be the approach most preferred by developers, architects, and city officials today, although there are certainly contemporary examples of the former (Kirkwood 104).

There has been a series of debates and questions in regard to brownfield redevelopment, as outlined by Niall Kirkwood (30). The first debate began in the early 1990s, with the development of Emscher Park (Duisburg-Nord). At the time, controversy surrounded the architects on the project because they did not develop a comprehensive total site plan. Instead, they opted to partition some of the land off as "contained pollution" and develop the rest parcel by parcel as independent projects. It was seen as more beneficial and more likely to get the entire site developed if it was done piece by piece rather than as a whole project done in phases. At Emscher Park, greenways and waterways were laid out first and used as an infrastructure for planning and a catalyst for renewed integration of the environment with...
property investment. No large scale investment meant that this huge site could be uniquely developed piece by piece, as opposed to comprehensively. By establishing “green corridors” and setting up certain values and ways of life that were to be achieved by these projects, the “parcel by parcel” redevelopment approach has proved to entice more investment in the long run, get people more comfortable with the idea of brownfields, and to shape the future of the area in a socially prosperous way (Kirkwood 110). Other ongoing brownfield efforts, such as my site in Milwaukee, have been stagnant for years since large master plans always get rejected because there is always one piece of the “vision” that cannot be collectively agreed upon (MVP 6).

A second debate that has surfaced beyond the “planning vs. parcels” debate is one of industrial flight (Kirkwood 33). This debate surfaced towards the turn of the century as cities became increasingly focused on bringing residents to inner cities in efforts to control the ongoing suburban sprawl problem. Since the inception of places like Silicon Valley and other “clean
"industries" of modern times, designs of these facilities have lost character and have become gradually more detached from the city. Whereas in the 1950s and before, factories were built to last and became a dominant and iconic force on the American landscape, newer facilities have simply become an outward reflection of universal technological advancement, rather than a contribution to the character of a city (Gans 75). This is even more evident as an increased number of “technology parks” emerge in outlying areas of the city, where land is abundant enough to hold on-site parking, on-site clean up facilities, and everything else imaginable that an employee would need without having to ever leave the comfort of their office building.

It is far more socially, environmentally, and economically beneficial in the long run to focus on reusing old brownfield sites first rather than to spread to the suburbs at a rapid pace (Wright 57). A prototypical profit-driven laboratory in a rural area contributes nothing to the community other than jobs; moving these facilities back into abandoned brownfield sites in the inner city would
create unique design opportunities, as well as a high-quality live/work situation near urban city centers in an attempt to reinvigorate the American Downtown (Kirkwood 41). Design is something that often gets overlooked in these facilities due to their suburban location and/or the company’s interest in the bottom line, but must certainly be addressed in an urban context, as it is crucial to quality of life and the community.

The most recent brownfield debate that has surfaced in the past few years is one of sustainability (Kirkwood 39). This is a broad term when applied to architecture, but in this instance Kirkwood refers to the notion of preventing future industrial trauma rather than just the “fix it when it’s broke” approach. America only has brownfields in the first place because manufacturing plants parasitically consumed their sites and then left, leaving these locations severely contaminated. It was seen as more cost effective to just dump the waste and worry about it later. With environmental protection laws on the rise, modern day facilities can and should be designed with the utmost
sincerity and respect for the natural landscape that surrounds them, both in terms of immediate site and the city itself. Today, newer technology and research parks, in addition to factories, are latent with fresh “green” ideas and sustainable features. These include on-site cleanup and the prevention of waste pollution. This provides not only a quality ecosystem, but also unique design opportunities, as well as an educational experience for ways a city can adopt these energy-efficient ideas and apply them to other aspects of life, using these manufacturing facilities as a flexibly-designed anchor (Kirkwood 12).

Beyond all of these debates and ideas, what does the future hold for brownfield development? A couple of the books that I examined alluded to theories that would propel this movement forward. One such theory was presented by Peter Eisenman in his discussions of “industrial site as palimpsest” (Kirkwood 128-129). A palimpsest is a tablet or piece of paper that has been erased and written on multiple times; each time the previous layer remains visible. This is how Eisenman sees a brownfield site - originally as a blank

Renderings for Stormwater Park + corresponding “green” housing for the Menomonee Valley, ca. 1999 (proposed)
This leads to Eisenman's theory that brownfield redevelopment is not a linear/chronological process, but rather a series of layers connecting the past (history) to the present (memory). Designs for these sites should address these layers appropriately, by addressing each as unique. This can be something as simple as the use of interstitial space as "building," addressing the collision of two city grids, incorporating wetlands or canals into the project to reference the original habitat, or even something as profound as what was done in Landscape Park Duisburg-Nord, namely interactive use of found artifacts.

In reference to Eisenman's use of "interstitial space as building," he is mainly referring to two things: the use of space within an existing building as a building in itself, and the infill of property between two or more untouched industrial buildings (Kirkwood 129). A good example of the former would be Piazza Metallica at Landscape Park, in which a space was created within an existing building. All of the
"interstitial space" between manufacturing elements, machines, and rooms was cleared out and turned into a public plaza. In the latter definition, Eisenman similarly discusses the use of space between buildings in order to “create character,” rather than to tear down several industrial buildings to make room for a larger new footprint (Kirkwood 131). Eisenman, as well as the architects at Landscape Park, seem to prefer leaving the site intact for the most part and working around it, thus reemphasizing the “palimpsest” idea; a new iteration or site intervention always adds on to and/or references the previous one.

Another theory presented is by Robert Smithson, a renowned landscape architect and artist (Kirkwood 127-128). His works involve the manipulation of the earth as a form and as an “indicator of time,” and he encourages the engaging of the earth as a medium. In regard to brownfield sites, Smithson has said that “human intervention on landscape is as natural as an earthquake,” and it is a “mistake to hide post-industry.” Smithson advocates that designs on these sites reflect time and change, and are done with a relative ambiguity. He is
opposed to the “clean slate” approach. Both he and Eisenman would seem to support some sort of integration with old on-site human elements as a reflection of character and history.

“Spiral Jetty” is a work by Robert Smithson that showcases his “earth as medium” idea, but this can certainly be applied to something more “useful” and less for show. Smithson argues that this applies mainly to landscape doubling as some sort of functional element that may or may not be coupled with built form. In other words, any natural intercessions on an industrial site should be manipulated rather than removed, i.e. the opposite of the clean slate approach. This can be seen in the Olympic Village project that I will describe later, in which some of the contaminated soil was cleaned and redistributed as a bank around a marshland. This is also evident at Landscape Park, in which every existing natural condition was left as is, and either added to or replanted. All natural overgrowth is managed but not removed. In a less literal fashion, Smithson’s ideas can be seen when former habitats are reintroduced to a derelict site (Kirkwood 128).
The concept of "earth as medium" is definitely up for its own interpretation, as even Smithson himself indicates (Kirkwood 127). It can be something as literal as a natural amphitheatre built into a hillside, or as unnoticed as an untouched field. But the most important part to take out of his ideas is to work with nature, and not against it. Just as Eisenman uses existing buildings to create space, so does Smithson advocate the use of existing natural elements to create or manipulate space.

Renzo Piano has also weighed in on the subject of industrial remediation (Gans 13-19). Piano views the brownfield/city relationship as a dichotomy, with the brownfield being unstable and the city being stable. These sites come in all shapes and sizes, and in many different categories: Harbor (Genoa), Political (Berlin Wall), Social (Potsdamer Platz), and the generic manufacturing site. Each site has to be treated differently by its historical categorical context, and its unstable or "exciting" relationship to the rigid, stable city is crucial. Piano views brownfields as less "frightening" and less difficult,
because they are not empty; rather, one is merely “mixing memories,” which goes back to Eisenman’s theory of bridging the gap from history to memory. Piano states that the city provides the site with discipline already, and that any intervention on a brownfield is simply a “new mutation” that is linked to the city literally and theoretically. The emphasis on these sites should be on everything not visible; that is, the topography, society, the history, etc. – all the things that give a site its character. If the architect focuses on these intangibles, the site will “design itself” and the architect will not get trapped in a so-called “style” or aesthetic, as today’s suburban research parks often do. Brownfields are the opposite of immaculate – they are “full of inspiration, rather than abstraction” (Gans 20).

Piano’s views are written in a different manner than Eisenman’s, but in actuality both seem to share the same viewpoint. Piano and Eisenman both advocate invoking the history of the site and treating anything new as an “intervention” along a timeline. It is far less critical to get caught up in any architectural suggestions than to
speak to the character of the place, the history of the site, and the culture of the city (Gans 19). Much like one would not design a straw house in Seattle, or an adobe building in Chicago, so too does the nature of the brownfield site dictate what goes there, and if not what goes there, at least how it is built/designed. This prevents a large expanse of abandoned site to be turned into the dreaded cookie-cutter, big-box, kitschy retail site full of chain restaurants and K-Marts. As I go on to explain in my precedent studies later, it is very possible to build the same type of community in every city, but it is the local flare, civic pride, community interaction, and site history that give each brownfield site individual character. The main concept to draw out of Piano’s writings is that, as with his colleagues, he finds the “clean slate approach” to be incorrect and counterproductive, because it leads to uniformity and anonymity of place (Gans 13-20).

Lastly, engineer Himanshu Parikh also provides some clever insights on the topic (Gans 34-40). His main argument is that brownfields should be integrated into the fabric of the city,
using them as an “urban net.” They should not be treated as individual sites, but rather a commonality should be explored between the sites and the inner city. Parikh’s proposal for making this happen is to focus on the cleaning of America’s rivers. He argues that throughout the course of history, civilizations have developed along the rivers, and industries have always sited themselves next to rivers or canals. Cleaning and utilizing these waterways to connect various sites could prove to be beneficial both socially and economically. Without these cleanup efforts, it could lead to slum developments in the future. The main theory Parikh wants the reader to grasp is that the city should be viewed as a patient, and not as a “site of disease.” If we see brownfield sites as a consequence of illness instead of the source of urban decay, it will be easier to attack the problem (Gans 40).

Brownfield redevelopment in itself is not a revolutionary idea, but when these areas are brought back to life via the “creative class” as an economic and social engine, the results could prove to be unique and beneficial. In The Rise of the Creative Class, Richard
Florida discusses how cities that are not “on the cutting edge,” culturally speaking, are losing the economic battle. Florida compares old industrial cities in the North and Midwest to booming cultural cities in the rest of the country, saying that the former are “trapped by their past” and often find it difficult to adopt new organizational patterns (10). Newer high-growth cities like Austin, Seattle, and San Francisco are more open to newer ideas because they are relatively young cities.

Florida puts forth a very compelling argument for how and why industrial cities (his example is Pittsburgh) should unite and shift their focus and direction to accommodate the youthful creative class in order to facilitate growth and prevent these hard workers from leaving these cities. Identity is still and always will be an important factor that draws people to a city; just as cities like Pittsburgh, Milwaukee, and Duluth have or had strong manufacturing/industrial identities, it is important for these cities to reevaluate these identities to attract the creative working class, which now constitutes over 35 percent of contemporary society (Florida 14).
Redeveloping their brownfields into neighborhoods that adhere to this emerging class would be a monumental start.

Florida’s creative class is “a fast-growing, highly educated, and well-paid segment of the workforce on whose efforts corporate profits and economic growth increasingly depend” (3). Members of this class do a wide variety of work in a wide variety of industries: technology, high-end manufacturing, entertainment, finance, journalism, and the arts. They all share a common ethos that values creativity, individuality, difference, and merit (Florida 3). The ethos is strong enough that businesses now find themselves adapting to the class, rather than vice versa; those that do not adapt often fail in luring these workers to their cities. The distinguishing characteristic that sets this class apart is their creative energy and ability/willingness to create “meaningful new forms that are readily transferable and broadly used” (Florida 4). In other words, they are the inventive think-tank of today’s society, and are responsible for some of the most innovative technological breakthroughs of the past 30 years.

Florida argues that large spending on entertainment and stadiums are not the answers. These large footprints tend to require large parking lots, and they are typically only “destination spots,” thus making them unsuitable anchors for residential development.

[top] land around Miller Park in Milwaukee
[middle] Truman Sports Complex in Kansas City MO
[bottom] Mall of America in Bloomington MN
Members of the “creative class” value certain things in a community, such as independence, quick adaptability to new surroundings, diversity, high quality of place, variety, active recreation, intellectual stimulation, authenticity, and uniqueness. These are characteristics that communities like Greenwich Village in New York City and Adams Morgan in Washington possess. These are not characteristics of industrial towns that opt instead to pour resources into big box retail, large stadium complexes, and shopping malls - again, they are “trapped by their past.” At the same time, cities that try to mimic the success of certain areas may include certain key elements such as a high-tech industrial park to entice intellectual workers. Without the aforementioned elements, it becomes merely another cookie-cutter office complex (Florida 6).

It is imperative to former factory towns, as in the one I am looking at in my thesis, to incorporate this prominent class when thinking about valid brownfield redevelopment strategies. Rather than leaving the site to rot, or worse yet, to simply fill it with large scale retail and chain restaurants in a
feeble attempt to establish an ‘entertainment district,’ it would be more effective to use Florida’s strategy. By mixing the historical remnants with new, smaller development in a way that is not kitschy while simultaneously capitalizing on the strength of the class itself and providing a large technological workbase, the “creative class” can be lured into these formerly derelict sites by the features they crave – a unique, diverse, and self-sustained live/work neighborhood. By reaching out to a hard-working, young category of people with starting incomes of about $50,000, the tax base would undoubtedly skyrocket, subsequently increasing land value in the former blue collar neighborhoods around the former factory site. It is not stomping on “traditional values,” but rather an attempt to fit a large community under one umbrella: young and old, fashion models and “bag ladies,” long-time residents and yuppies (Florida 10).

It is critical to integrate the “creative class” of young professionals in an attempt to revitalize urban cores of former manufacturing towns because: (1) less than 25 percent of American
Households consist of a “nuclear family” and people are getting married later in life (in other words, the young professional is the typical demographic); (2) they work longer and harder than any other group of people, and are more prone to take risks and increase skills rapidly - this leads to increased company profits and greater innovations; (3) creative class people do not lose their lifestyle preferences as they age - they raise their children the same way, thus making a "creative class" community probable to stand the test of time (Florida 12).

In Ray Oldenburg’s book The Great Good Place, Oldenburg outlines what makes great social places. He refers to these places as “third places,” namely places other than home or work where one hangs out (Oldenburg 4). However, it is more than just “hanging out” for Oldenburg; these spaces are crucial elements of a city that promote social welfare, community, and greatly reduce stress and anxiety in daily life (Oldenburg 156). Without these spaces, cities become a mindless landscape of destinations, and people become more introverted and prone towards long hours in the office and long hours spent in

Two river beautification projects near downtown Milwaukee; the Hank Aaron Trail suffers [top] while the Riverwalk [bottom] prospers. In accordance with Florida’s research, this goes to show how much of an effect development choices really have on how a neighborhood develops, even if key ingredients are the same (in this case a river and proximity to downtown)
front of the big screen television at home. “Third places” are the key ingredient to a lively city, a profitable local economy, social well-being, and national identity of the region (Oldenburg 6). He argues that, although more money is being spent on home amenities by individuals, and more is being spent on so-called “entertainment districts” by the city, these things do not promote social gathering or further development, but rather a static lifestyle centered around events and ritual rather than chance happenings and friendly meetings. The keys to success in bringing people back to the city, and to creating a sustainable social village, are the people and their interaction, and his book discusses some classic examples of great places.

Oldenburg outlines many examples, but three major ones: the German Beer Garden, the French Café, and the English Pub. He also sites one poor example, the typical American Tavern. The original German biergärten were like the county fairs or farmers’ markets we experience in the United States today. Drinking beer was just one of things one could do there, it was fun for the whole
family, and food/drink was ridiculously cheap in order to keep people coming back and to promote long stays. It was a scenic place to gather in which one could experience the local flare/cuisine of that particular town, and there was something to do for everyone. Children could play on rides, loitering and mild-mannered mischief was encouraged amongst teenagers, and adults could enjoy a pilsner and a nice conversation. These were not just destinations for a family dinner, but rather places people ran into each other and congregated for a few hours after each work day. Today in America, we see places like rathskellars and Chuck E. Cheeses as bastardized versions of these - places that included all of the knickknacks, pizzazz, cuisine, and games, but none of the character (Oldenburg 80).

The main concept that works for the French café is the blurring of street and building. Often times in a café in France, frequent visitors will never even walk inside, but will rather enjoy themselves and each others’ company on the sidewalk tables under an awning. The ratio of café to people in France is about 30:1; with there being so many, most places do not even have names,
because every block has its own. A typical French citizen can walk out of one's home and tell his or her spouse that he/she is going to the café, and that spouse will know exactly where to find him/her. Many citizens have their mail sent to the café, they purchase groceries there, and conduct daily business; the café is the main arena for work and conversation outside of work and home, and rarely does one feel the need to “meet people” anywhere else. Cafes work well in France for two reasons: (1) vibrant streetlife and neighborhood character activates the sidewalks; (2) people mind their own business more so than we do in America; and (3) little if any advertising. The American versions of Starbuck’s, shopping mall food courts, and restaurants with outdoor seating do not work, simply because advertising is abundant here (“eat and go” mentality; concern for profit), Americans tend to be eavesdroppers and people-watchers more so than minglers with strangers, and many of our neighborhoods lack streetlife and street character (Oldenburg 109).

The English pub’s contributing characteristic is its diversity. Pubs
in England are known for having several rooms with varying functions to allow a plethora of visitors from all backgrounds and interests under one roof. Although these separations of function were originally a result of social class barriers, today they remain for purposes of tradition, novelty, and variety of activity. These rooms mainly vary in range of comfort, size, and mood. Most pubs will have a large room lacking any ornament or style whatsoever, a long simple bar, dartboards, and sawdust on the floor. Rooms then escalate in terms of things like intimacy, price/type of drinks, furniture, and type of crowd. Any one person can go to the same pub on the same day at four different times for a business lunch with colleagues, a dinner date with a significant other, to watch a cricket match among strangers, or to get rowdy and intoxicated with a group of friends. The keys that make it work are flexibility of uses and overall lack of decadence (Oldenburg 124).

In summary, the American tavern fails in all areas where the Germans, French, and English have succeeded in their particular establishments of choice. The American tavern often has
expensive drinks, greasy unsettling food, and does not promote large families or groups to attend, in stark contrast to the German beer garden. This is sometimes offset with free peanuts at the bar or “happy hours,” but these are temporary gimmicks and people are encouraged to drink and be on their way (Oldenburg 200). The American tavern will sometimes provide outdoor seating, but it is merely an extension of the interior to sit on nice days and does not engage the sidewalk as in the French café. Outdoor areas are used at only certain months of the year and are often partitioned from the sidewalk (Oldenburg 210). The American tavern often makes feeble attempts at introducing a “lounge” or “billiards room,” but these areas usually bleed into one another. American tavern-goers usually tend to gravitate towards these bars as “destinations” and will not remove themselves from the pinball/dart/pool areas once they have arrived. Drinking and conversation becomes a side note (Oldenburg 218). The American taverns, coffeehouses, and restaurants have the potential to be great “third places,” and Oldenburg would argue that they have to be order
to promote social well-being and maturity (Oldenburg 255).

In Kevin Lynch’s book *What Time is this Place?*, his main point of discussion is why we as humans preserve the past, and what its benefits are. He states that the purpose for retaining the past is so that our present becomes more viable and meaningful (Lynch 45). Lynch also discusses a “management of change” of how things should be preserved and to what degree. He feels that we can use the past for guidance and wisdom in present and future purposes.

Only a couple of chapters in this book are directly relevant to this thesis, with the main one being a section entitled “Fragmentary Reminders.” In it, Lynch states that we “need not be so concerned about perfect conformity to the past form but ought rather to seek to use remains to enhance the complexity and significance of the present scene” (Lynch 57). He argues that the contrast of old and new, utilizing only small concentrated elements of periods gone by, even if they are fragments, will in time produce a meaningful, rich, and aesthetically appealing landscape that no period can
equal and no other city can match (Lynch 58). What this means to this thesis is that preserving structures and elements that are important indicators of the site’s and Milwaukee’s past, namely the old breweries and cement factories, are beneficial to the site in every way imaginable, even if the entire building(s) cannot be preserved. This was the approach taken in Landscape Park Duisburg-Nord and also parallels with Peter Eisenman’s notion of “palimpsest.” Layers of history on this site will help to create a character and cultural atmosphere that is unique specifically to my site. Although I am looking to connect with the existing professional/artistic communities around my site, restoring certain layers of fabric will provide opportunities and visions that are unmatched anywhere else, thus making it a desirable place to live and interact.

From these brownfield/urban village strategies, steps for redevelopment, and contemporary theories, I can concoct a plan for attacking my site. A brownfield site is a distinctive situation that warrants attention, and it should make this thesis very interesting. Brownfield sites have the
potential to bring people back to the inner cities by creating jobs and a friendly live/work environment when rehabilitated. These readings show that there are effective strategies to reuse these decaying lands, and that remediation is not beyond reach. Lastly, as my subsequent precedent analyses will further prove, urban villages or “creative class neighborhoods” seem to be the optimal choice for redevelopment.

[B3::precedent_analyses] The four major projects I have researched as precedents for my thesis are Landscape Park Duisburg-Nord in northern Germany, Atlantic Station in Atlanta GA, the Pearl District in Portland OR, and Olympic Village in Sydney, Australia. I am also researching a number of different cities and books to obtain specific direction on street design and adaptive reuse strategies.

Landscape Park Duisburg-Nord began construction in 1990 and was designed by Peter Latz + Partners. The park is one of over 100 projects involved with the International Building Exhibition Emscher Park, in which the cohesive goal was an attempt to set quality
building/planning standards for the transformation of an old industrialized region. This park is the key project of the IBE, intended to reflect new ideas about landscaping and reclaiming industrial land. The concept of the park is to integrate and develop existing patterns and structures that were formed by the Ruhr District's previous industrial use, and to find a new interpretation with a new syntax. The existing fragments are interlaced into a new "landscape."

The region is surrounded by approximately 2.5 million residents. The park utilizes "found objects" on the site, as well as existing structures, most of which are defunct and/or abandoned. It exists today as a large collection of artwork and sculptures created on site by engineers, a series of canals, and a network of green spaces, passageways, and plazas, encompassing 230 hectares of land.

My thesis is about how to appropriately decontaminate, reclaim, and redevelop derelict industrial land near urban city centers. This project is especially helpful because of its broad scale, much like my study area of choice in Milwaukee WI. It provides
unique examples on how to clean up a manufactured site and make it aesthetically appealing to visitors, as well as examples that speak to how abandoned buildings should be dealt with. This project has many social and economic underpinnings. Whereas the primary motive initially was to clean up the site and create a park with a unique atmosphere, the long-term goals of the project are to draw in a consumer and visitor base that would be substantial enough to allow for future growth and development.

This project serves as an example of how to make a brownfield site attractive again for new investments. By capitalizing on a unique opportunity, while drawing in nearby residents, this park provides potential for economic expansion. This project is also loaded with cultural symbolism and value; by going beyond the "bottom line" and profitability, this park seeks to establish an identity as a unique destination for tourists and residents alike. The area of study in my thesis - the Menomonee Valley in Milwaukee - certainly possesses this same potential. With its proximity to downtown, canals, railways, the freeway, and thousands of
residents in adjacent neighborhoods, it has the opportunity to become a unique cultural node for the city.

Three parts of this park I have studied are: Piazza Metallica, the “Old Emscher,” and Bunker Gardens/Sinter Park. Piazza Metallica consists of two parts: the plaza itself and an area called Cowper Place. Old industrial substance is the basis for this portion of the park, and existing blast furnaces provide the symbolism. This symbolism is evident in two locations: first, in the main plaza is a series of 49 rusting iron plates found on site mark the central space; secondly, in Cowper Place, the user is most of the time enclosed entirely within an old blast furnace plant (Kirkwood 96).

The major theme of “physical nature” is embodied in the aforementioned qualities of the space(s) (Kirkwood 97). A second major theme of the piazza is one of “utilization of the place.” Instead of new structures being built, the existing ruins take on a new functionality and playfulness within the site. The goal of this area was a “metamorphosis of industrial structures without destroying them” (Kirkwood 97). The architects chose to use these old
buildings to their advantage to provide a cultural and educational experience for the user.

One major thing to learn from this part of the park is the user’s overwhelming acceptance of the existing structures. By utilizing found materials and reformatting them into plazas, climbing walls, and trails, the user is allowed to replace his/her fear of historical contamination with a calm demeanor. This is especially noticeable in Cowper Place, where crowds in excess of 50,000 gather inside of an old factory that is now filled with trees, trails, a music hall, and training workshops.

The “Old Emscher” is part of an extensive “water park” on the site of Park Duisburg-Nord. The Emscher is part of an old waste system, comprised of a series of old canals, cooling basins, and retention ponds that have seen some brutal pollution in their time. Most of this contamination has been cleaned up; some of it, however, is merely contained and shut off from the rest of the park.

The Emscher itself was formerly an open wastewater ditch that carried non-treated sewage to the Rhine River, much as the contaminated canals in the
Menomonee Valley were used to carry sewage into Lake Michigan. A new clean-water system was implemented so that the rivers and ponds could be used in the park; the waste water is now carried below the canals in a 3.5 meter diameter main underground, which is surrounded by a thick layer of clay. Today, the canals and ponds have been cleared of polycyclic aromatic hydrocarbons and arsenic mud, and hold only rainwater, which has fostered in a "new" ecosystem (Kirkwood 103).

Much like the Piazza Metallica, this portion of the park represents an attitude of acceptance. Rather than to deny that there are contamination problems or to push the problem away, it was dealt with in an arduous process in an attempt to revitalize the area. Whereas the canals were never previously used by humans or for scenic purposes, today they exist as an amenity in the park. Coupled with over six hectares of marshland, these waterways are a huge step in alleviating concerns of contamination cleanup in a way that appeases the user (Kirkwood 105).

The Bunker Gardens and Sinter Park is a combination of adaptive re-use for former industrial artifacts and
preservation of over 200 species of wildlife that have flourished in and been supported by contaminated areas. The “sintering park” is located on the site of a completely demolished sintering plant. The contaminants and rubble on site were sealed, recycled, and placed in bunkers underground, and today the park expands on top of it in the form of “roof gardens.” Sinter Park also contains a large natural amphitheatre, with an old transformer station serving as a makeshift stage building. This park is framed by a catwalk (welded on-site out of an old railway) that leads through Bunker Gardens.

Once filled with ore, coal, lime and ashes, the bunker walls now enclose old pollutants in sealed containers. Between the walls are now gardens of great variety and abundance. They are places of retreat and contemplation that become so important in a park of this scale. Much like the Piazza and the waterways, this area of the park creates beauty from nothing, and holds crowds of people where pollution once ran rampant (Kirkwood 111).

In conclusion, the idea to develop the future out of human destruction has
obviously existed way before the project was implemented, and will exist for quite some time. However, this precedent is an excellent example of how to deal with an area on such a large scale, while keeping a cultural identity intact. The question that arises out of this project is this: what is the relationship between the function of this park as a grandiose municipal open space and its importance for tourism and economic development? This park has proven to be a substantial draw for the surrounding residents, but can it be a draw for permanent residents, and can it be an anchor for a new community? Will it work in an American context, where so many of these blighted industrial lands occur so close to the downtown?

I feel that the answer to all of these questions is that it will work in coexistence with other things. This park is certainly a powerful model for how to clean up the Menomonee Valley in an efficient and appealing way. Implementing something like this in my thesis would hopefully achieve the same things as Park Duisburg-Nord did: (1) sizable ground contamination cleanup; (2) a thriving and unique ecosystem centered around existing canals; (3)
attracting a large tourist base that is capable of creating permanent residents and potential for major economic growth to capitalize on the beauty of the rejuvenated area.

Atlantic Station in Midtown Atlanta is a 138-acre brownfield redevelopment project that opened in October 2003, but is still ongoing. It is directly bordered by the downtown to the north, and when completed will contain over six million square feet of office space, 10,000 new urban homes, 1.5 million square ft. of retail/entertainment, three hotels, and eleven acres of parkland. Atlantic Station is expected to generate 20,000 new jobs, $619 million in resident salaries, and several million dollars in new municipal and county tax revenue (MACTEC 1).

This site was originally occupied by the Atlantic Steel Company, the first steel mill in Georgia, in 1915. Its profits and employment peaked around World War II, and it was eventually acquired by a Canadian company in 1979. By the 1990s, competition and outsourcing caused employment to plummet, and the factory finally shut down in 1997. It remained until recently, as many American manufacturing
sites, as a contaminated eyesore in the city's landscape. Built on what was once the periphery of the city, freeways and buildings have since grown up around the area, making the site more coveted than ever despite its environmental risks and problems. Jacoby Development Inc. finally took this redevelopment challenge head-on in 1998 with the purchase of the land, and construction costs are slated to be topping over $2 billion (Miller 1-2).

This project is extremely relevant to my thesis for a number of reasons. First of all, Atlantic Station and the Menomonee Valley are very similar sites. Both sites have shared the same fate and history. The Valley and Atlantic Steel both served as booming industrial hubs during the Depression on the periphery of their respective cities, but due to a variety of aforementioned factors, these sites were abandoned and left as urban brownfields just begging to be redeveloped due to their prime location.

Both sites are grandiose in scale. The Atlantic Station project encompasses about 138 acres, and the total area of the Menomonee Valley is about 1200 acres, with about two-fifths of this being uninhabited brownfield site(s).
Atlantic Station is currently the largest urban brownfield redevelopment project in the United States, and although I certainly do not plan on developing all 400+ derelict acres in the Valley, this project definitely has the opportunity to surpass this, using the Station as a model (MVP 1, MACTEC 1).

Both sites also possess similar challenges, namely community angst and disconnection from the city. Both sites have/had a public stigma and negative attitude towards them as “hopeless” and “dirty” (MVP 1, MACTEC 1). The Valley and Atlantic Steel are/were extremely segregated from the city by freeways, housing developments, and lack of roads going in and out of the area (MVP 1, MACTEC 3). Because of these three major similarities, Atlantic Station can prove to be a worthy contemporary urban-American model of how to deal with issues of large-scale decontamination, disconnection, site planning/zoning, and ‘green’ building.

One of the major themes of Atlantic Station is environmental protection and design. Beginning with the removal of 165,000 tons of contaminated soil, the developers and architects on this
project have made a strong effort to be environmentally conscious. The site implements a large stormwater management park and scenic rainwater ponds as the aesthetic centerpiece, known as Foundry Commons Park. Like at Landscape Park Duisburg, this park is main area of the site where the remnants and history of the site are evident, mainly through recycled materials, found artifacts, marshes, and message boards. It serves as a gathering area for residents and as a place of refuge and interaction with the site for visitors (MACTEC 5).

The site also includes many other green strategies, including lots of street landscaping and the planting of over 3000 new trees, solar powered and/or energy-efficient buildings, the use of recycled concrete excavated from the site, and a 130-ft wide multi-modal bridge crossing I-75 that includes bike, bus, and rail lanes (Chamberlain 3). Many of the office towers in the development are LEED-certified and have won numerous EPA awards. Atlantic Station is intended to educated residents and visitors about the importance of preserving the environment, and is also meant to serve as a catalyst for similar design
strategies throughout the city (MACTEC 4). Similarly, it is important for my design to incorporate ‘green’ design strategies; these will be discussed more in depth later.

A big part of the design process for Atlantic Station was community involvement, as was clearly evident at Landscape Park Duisburg-Nord (MACTEC 5). Community leaders of the surrounding areas were encouraged to meet with city officials to express their concerns about what Atlantic Station would do to their neighborhood(s). Open forums were held throughout to help erase people’s misconceptions about the formerly contaminated site and to allow all to provide design input into what they wanted to see in this new mixed-use live/work community that is so close to downtown. Whereas there is no physical way for me to implement community activity into my thesis design, it is important to note because it is a recurring idea in every brownfield redevelopment. My design must reflect the character of the surrounding area, neighborhoods, and city, rather than to just copy items from other similar projects verbatim.
It should also be noted that this site employed a similar design timeline as that of Landscape Park Duisburg-Nord. In order to avoid becoming a failed large-scale urban development dream without a big investor with monotonous design, developers insisted that each third-party residential developer hire different architects and builders (Chamberlain 2-3). This is reflective of the “parcel by parcel” approach explained earlier; in this case, developers and officials on the Atlantic Station project showed that cleanup was possible and that such a large scale design was possible by creating a comprehensive master plan first. With the master plan in place, the city of Atlanta then showed its support through TIF (tax-incremental financing) funds, and parcels were allocated to individual developers and architects. Despite all of the project’s challenges, it has achieved success to this point because the site had the guidelines of a master plan to follow, rather than just “big-box influx and chaos” (Chamberlain 3).

Despite this site’s apparent success, its main criticism has been the architecture itself. With everything being built within a 36-month span, the
entire site seems very “sterile” and “overprogrammed” (Chamberlain 4). It will take a long time for the site’s character to not seem artificial and for the area to seem “lived in.” Jason Miller describes the project as “surreal,” saying that the “large commercial buildings are very banal architecture, and the townhouses are abysmally designed as they are suburban in nature. The streets are too large, the open spaces are too large, and the major roads are too speedy” (3).

However, from a planning and development perspective it seems to work. The integration of an office park creates a solid financial base during the day for the large amount of retail, as well as keeps the urban places active at all hours. The entertainment district attracts non-residents and offers a wide variety. The site itself is dealt with in a sort of macro-mixed use fashion, using superblocks that are broken up with pedestrian areas. Rather than wait for local retailers to take a chance on the site, Atlantic Station LLC went out and recruited a critical mass of national chains first, hoping that in time local vendors will come around and join the crowd, pushing out the IKEAs,
Applebees', and Old Navys (Chamberlain 2). Lastly, the most agreed upon aspect of the site that works has to be the large "plinth" in which people park. The entire site sits atop a giant 2-3 story parking garage, which allows blocks to not be tainted with the site of parking garages and surface lots. All of these qualities allow the site to serve as both a destination for outsiders, and a comfortable place to live (Miller 4).

In conclusion, this project is an excellent example of a large-scale contemporary urban brownfield project that mirrors the Menomonee Valley's problems (and promise) in a lot of ways. From a planning point of view, this project does everything right - it deals with contamination uniquely with the creation of stormwater parks and a site-wide underground parking garage; it looks towards a clean future through 'green' and LEED buildings; lastly, it serves as a destination that has the capacity to tie into Atlanta's downtown economically through a new tax base, socially via new residents, and physically through the extension of roads and creation of bridges and transit lines.
The main questions that arise out of this project that are unclear to me are the questions of “green” and “architecture.” Readings I have found up to this point are unclear as to what “green” strategies this project uses, only stating that many of the high rises are LEED certified and that a stormwater park is there. It is important for me to decide how far I want to take this concept; in that, is it just important to decontaminate the site and include marshland, or should I also include radically innovative and energy-efficient buildings? Also, many critics of this site have sited “weak design” as their major grievance. It is very important for me to use the ideas of Atlantic Station in my planning process, but not to replicate their supposed architectural failure. Of course, this is subjective, but by employing small blocks and lots of neighborhoods within the development, the temptation to create thousands of identical homes may not be there (Miller 5). Atlantic Station tried to do this, but perhaps they just did not go far enough.

The Pearl District in Portland opened to residents and commercial activity in 1992, and its name is truly
indicative of the site’s transformation – a shiny pearl amidst an ugly oyster, or in this case warehouse and railyard buildings. Situated near the Willamette River, it attributes much of its success due to the inspirational stories of Adams Morgan in DC and SoHo in NYC, both of which are sort of “rags to riches” stories in which warehouse ghettos became thriving cultural epicenters via risky development and a lot of patience (Hinshaw 34). Today, the Pearl District serves as the artist node of Portland, and is centered on three large parks and a revolutionary streetcar line that began operation in 2001.

This development certainly has good strategies and ideas, like my other three precedents, but this one more than the others offers the most specific design advice that I can translate into my thesis. The first thing would be the streetcar line. This line is revolutionary for two reasons; (1) it was the first entire brand-new system built in the United States that does not use salvaged tracks and cars exclusively, and (2) it was built before there was even something for the streetcar to travel to. Portland city officials knew that where there was
rail, people will build. Whereas bus routes might change and roads might go away, rail shows permanence and proves to developers that the city is committed to building and growth going on in a certain area for a long time (Hinshaw 40). A streetcar line in and of itself typically does not turn a profit, but the millions of dollars of development spurred in the past decade in Portland should be rewarding enough (Hinshaw 40).

The Pearl District, Atlantic Station, and the Menomonee Valley are all separated from the downtown with a massive interstate. Whereas Atlantic Station chose to deal with this obstruction with a 130-ft wide road going over the freeway at one spot, the Pearl District chose to institute a series of at-grade rail lines. These are much less intimidating and much more pedestrian-friendly than a large road that enters the site at 40 feet above ground, as at Atlantic Station (Chamberlain 4). When laying out my site, public rail transportation has to be one my first considerations, and will prove to be a key ingredient to success. To make the Menomonee Valley unique, pedestrian-friendly, safe, and to show a commitment to development, roads alone
might not be the answer. A streetcar line, coupled with small-scale retail, narrower streets, and many pedestrian-only areas, can allow my thesis project to become the "pearl" of the otherwise ugly Menomonee Valley.

Another important design concept used in the Pearl District that is relevant to my thesis is that of street character. This can be seen in many ways throughout the District. It can be seen in the way that low-income renovated structures sit side-by-side with new infill development, making for a much activated walking experience. Bicycle lanes, car lanes, streetcar lanes, and wide sidewalks populate every street with people and traffic. Recognizing that wide and fast streets zipping through this warehouse landscape would be unwelcoming and detached, intimate narrow streets are employed instead, using the woonerfs in Amsterdam as a model (Hinshaw 36).

With people and visual activity crowding the streets already, add landscaping and intimate retail, and the Pearl Districts truly exhibits "living streets" throughout the entire site (Hinshaw 36). The streetscape is definitely the focus of the Pearl
District, as everything from garden plantings, to narrow streets and tree plantings, to small block size, to window heights, to narrow pedestrian enclaves; everything is designed to the human scale. The streets came first; they were the priority in this development. Rather than in other cities, where a large development project like this might result in a mega-development by a major corporation, Portland has instead remained steadfast in keeping block, building, and street size small, thus creating an inherent diversity of forms and architectural styles (Hinshaw 36).

Both Atlantic Station and Pearl District have attempted to downplay the presence of the automobile, but the Pearl District succeeds a bit more in this category. Atlantic Station utilizes a large underground parking garage, but there are still fast major thoroughfares, and there is still congestion getting into this garage (Chamberlain 5). The Pearl District, although it realizes it cannot remove the car entirely, narrows the streets, infuses a rail line as the main convenient method of traffic, and encourages pedestrian access to anywhere
and everywhere by making the sidewalk the focal point of the street (Hinshaw 38). These are all areas in which Atlantic Station seems to drop the ball, although an apples-to-apples comparison is not entirely fair since its site is so much larger and was a clean slate to begin with.

A third thing to mention briefly that is present in the Pearl District is three block-sized stormwater parks: Tanner Springs Park, Jamison Square, and the infamous Pioneer Place (Hazelrigg 112). As at Landscape Park, and Atlantic Station, these sites utilize found materials, and have a goal of managing rainwater to provide ‘green’ areas for their respective districts, as well as an affluent source of activity. The parks in the Pearl District are yet another example of how important stormwater containment, environmental cleansing, and local wildlife/plants are to a brownfield site (Hazelrigg 118).

Street character and streetcars are two aspects of the Pearl District that I can implement in my thesis. The Pearl District proves that in an urban district, landscape design and civil engineering are very important, even more important than the architecture...
itself (Hinshaw 40). This begs the question, "Why was architecture seen as such a failure at Atlantic Station if it does not matter?" The obvious answer to me is that had Atlantic Station been successful in achieving an intimate human scale on its streets as the Pearl District did, maybe nobody would have noticed the horrific architecture quite as much. One never talks or writes about the buildings in the Pearl District, but that is only because nobody has to. It is the streets that give the area life. The street is where people congregate, socialize, and move; buildings are stagnant. But more important than anything, the Pearl District demonstrates how to learn from the successes of other cities while simultaneously infusing an area with a character and vitality that is distinctly local (Hinshaw 40). True, it is important for me to institute streetcars and street vitality, but it must be in a manner that says "Milwaukee," and not "Portland" or "Atlanta."

If one were to choose one significant contribution from each of the aforementioned precedents, Landscape Park Duisburg-Nord's would certainly be
how to deal with the existing site, Atlantic Station’s would be appropriate site planning and zoning, and the Pearl District’s would be street character and scale. In the case of Olympic Village in Sydney, the main idea is definitely that of ‘green’ and environmentally conscious building. The 2000 Olympic Summer Games in Sydney, Australia were highly regarded as “The Green Games,” and were supposed to be a 21st century model for large-scale brownfield remediation. My research has shown that this is extremely true.

Construction and cleanup began in 1993 on a site about 15 miles from downtown Sydney. The site, then known as Homebush Bay, is a 1900-acre disused industrial site that formerly housed the State Abattoirs, the State Brickworks, the Royal Australian Navy armaments depot, and was generally known as the “dioxin capital of the world.” Homebush Bay’s businesses ceased operations in 1988, but not before its various chemical industries, fuel terminals, petroleum storage areas, oil refineries, railyards, and prisons dumped toxic waste on or near the site for most of the preceding century (Beder 12). This contamination was all removed or cleaned
on site, and in September 2000 the $1.3 billion Olympic Village was opened to the public. After the games were completed, some of the civic buildings and a majority of the athlete housing were transformed into a suburb of city dubbed “Newington” (Taylor 1).

Whereas the Atlantic Station site was more similar to the Menomonee Valley in terms of size, proximity to downtown, and disconnection from the city, Homebush Bay’s actual site is much more similar to the Menomonee Valley in terms of contamination. Therefore, this makes all of its cleanup efforts relevant to my thesis. Much like the Menomonee Valley, Homebush Bay housed very “dirty” and polluting industries and even served as a landfill for manufacturing and household wastes during identical timespans. Both sites have/had extremely contaminated groundwater and waterways. Both sites once had a vibrant wildlife and plantlife that has since been destroyed. Fortunately for Sydney (and unfortunately for Milwaukee), the IOC deemed Sydney capable of creating the first “Green Games,” thus giving this site the shot in the arm it needed to get redeveloped.
Homebush Bay took several crucial steps to cleaning up the site. Firstly, all of the contaminated soil was treated on site rather than contained or moved somewhere else. All formerly contaminated areas were capped with a cover layer of clean fill and soil designed to restrict rainfall infiltration (Beder 16). Lastly, as in most cases, community involvement proved to be crucial. The IOC, Greenpeace, and various government authorities always kept the public in the loop, and made them aware of site progress, what was going to go there, and how it would affect them (Beder 17). Time and time again, community involvement has proven to be even more important than the cleanup itself. After all, this is America; the attitude in this country has always been “If you want to fix/change something, that’s great, but I don’t really care unless it affects me directly.”

The most important part of this story is not the actual cleanup, or even the new Olympic Village that gave this site life again. It is what happened afterwards that matters the most. Whereas most Olympic sites remain severely underutilized and vacant areas
of the city after the 17-day event has concluded, Sydney chose a different approach: convert over half of it into the world’s largest solar-powered suburb, Newington.

Initially, Olympic Village used many recycled materials, even some construction waste from the former industrial buildings. Newington then re-recycled these materials in the form of landscaping mulch, insulation materials, and road aggregate. Newington also created and used many recyclable materials, such as polypropylene piping instead of PVC, and wool insulation instead of fiberglass.

But the most remarkable aspects of this suburb are its energy strategies. All 2000 homes are entirely solar powered, which allows for citizens to have negative energy bills, since surplus energy “created” gets redistributed into a grid (IEA-PVPS 1). There are also many passive energy saving features. Newington homes have northerly aspects with window awnings to ensure that they stay warm in winter and cool in the summer. Strategically placed pergolas and deciduous trees allow winter sun to warm homes and offer shade in the summer. Specific window
glazing and wool insulation greatly reduce heat loss. All of these things have effectively halved the community’s total energy requirements (Taylor 2). Lastly, much like in the Pearl District, Newington discourages cars whenever possible with narrow streets, large cycle ways, walkways connecting various residential and “pedestrian enclaves,” pedestrian-only retail streets, a business park, and a rail line (Taylor 3).

Another environmentally sound idea to take out of Newington is its water system. Although Atlantic Station, the Pearl District, and Landscape Park Duisburg-Nord all contain marshes, theirs are mainly used to collect road runoff and rainwater, or just to look pretty. The marshland in Newington, however, is part of a very elaborate filtration system. A pipeline from Sydney supplies drinking water; after potable water has been used, it is then directed to an on-site solar-powered filtration station, which in turn releases the filtered water into the wetlands for further breakdown. Run-off and stormwater are also directed into these wetlands, as the suburb contains no sewer drains. All of this naturally
processed water is then pumped back into the station, and in turn is then reused in toilets, gardens, and parkland throughout the community (Taylor 2-3). This is a much more sensible and effective way of treating and reusing water than traditional methods.

Lastly, in an attempt to rejuvenate a formerly vibrant local wildlife scene, the Silverwater Nature Reserve was created nearby. Included inside are forest, wetlands, and a variety of formerly abundant and currently endangered species (Taylor 5). This nature reserve is in the midst of a metropolitan area containing over 4 million people, and definitely serves as an example of how a balance can be found between development wishes and conservation needs.

More than any other of my precedents, Olympic Village/Newington definitely exhibits the ‘green’ side of brownfield redevelopment. Newington shows that it is important to not only reestablish what used to be on the site, but to look towards the future and find/use ways that save energy and protect the environment. This suburb has since sparked an energy-conscious wave of building in the downtown Sydney
area, and hopefully by including some of these ideas into my thesis, my site can do its part to create a beautiful new ecosystem and to inspire downtown Milwaukee to do the same.

In the book *City Comforts: How to Build an Urban Village*, David Sucher offers many design tips for creating a quaint and desirable neighborhood. Although he certainly offers these as "formulas," he particularly focuses on the cities of Portland, Seattle, and Vancouver. Because he does focus on three specific examples, I consider this a precedent analysis and look to integrate some of these specific elements in my design.

Sucher's "Three Rules of Urban Design" are: (1) build to the sidewalk/property line; (2) make the front permeable, i.e. no blank walls, and (3) prohibit parking lots in the front of the building (Sucher 7). These three rules recur throughout the book; they are his major design guidelines for how to make streets desirable for walking. Pedestrians are the key to any urban village, as they serve to liven the space, increase safety and activity, and create a sense of place (Sucher 8). This book is more illustrative and
observational than discursive, but it helps to get a sense of these three design principles and how they can instantly transform the vitality of a neighborhood.

This book and its photos primarily show typologies. It presents a metaphor for the urban village as a way of describing the mix of intimacy and anonymity that most people desire and is largely missing in large urban settlements. Rather than focusing on grand strategic visions as in my other precedents, this focuses on the small details, because in the end what is important for a city is how it works at the human scale (Sucher 10). Rather than focus on density and concentration of people, this book and the three cities it identifies, outlines the small things that draw people together into denser settlements and make the mingling pleasurable. The overriding ideas that make Vancouver, Seattle, and Portland successful in this book is that they pay attention to details, copy other successful examples, focus on the private/public edge, focus on human comfort, and have a large quantity of mixed-use and adaptive reuse structures (Sucher 22).
In lieu of describing all three cities in detail, Sucher emphasizes certain architectural patterns that Vancouver, Seattle, and Portland do particularly well. The main points are:

1. allow for places for people to “mix and meet”
2. public transportation and universal accessibility
3. way-finding
4. feeling safe
5. little necessities and attention to detail
6. appropriately contrast new with old buildings
7. smooth edge from street to building
8. use interstitial space between new and old fabric as parkland, discovered space, or habitat restoration
9. lastly, personalize the neighborhood through artwork and iconic markers

The usefulness of Sucher’s analysis of these three cities comes from it being mostly observational in nature. Sucher simply went around with a camera and took pictures. This leads one to believe that every urban environment has many such examples of great urban details and urban village design components. The key is concentrating

^Sucher 11-94
them into one livable area in a consistent way. By watching how people flock to these certain documented areas in these cities, Sucher was able to identify all of the aforementioned qualities that make great neighborhood environments work. It is these small details that make the village constantly active (Sucher 161). Although master planning, zoning, architecture, and civil engineering are all certainly important, it is this attention to detail that Seattle, Portland, and Vancouver seem to do so well; this was certainly evident when researching the Pearl District in one of my previous precedent analyses. Following these human-scale guidelines will help this thesis move from the urban to the street scale by the end of the year.

[C: research_summary] There are four main issues that can be taken from my literature and precedent reviews. These issues occur chronologically as steps, making it easier to separate this thesis into phases. Those issues/steps are: (1) appropriate and effective cleanup methods; (2) rehabilitating the landscape and restoring the former habitat; (3) redeveloping the site in an
environmentally and pedestrian-conscious manner, and; (4) utilizing the young professional workforce to determine program and design solutions.

There are several ideas that go along with each of these major issues. These ideas do not necessarily fall under only one of the four issues, but rather seem to encompass several at once. One idea is that of the importance of gaining public support in brownfield development. Across the board, in everything I have read, this is repeated as the crucial first step. It is very important to keep the public informed and to get citizens involved in cleaning up the site and participating in design charettes and planning meetings. Citizens often wrestle with city officials over the conundrums of "What is this going to cost me?" and "Why is it worth it to me to be interested in that decrepit site?" The most important thing that can be done to erase these misconceptions is a major cleanup effort; not only to show the citizens that government cares about the city and the environment, but to care for and beautify the continuing potential of these sites.
A compelling example of this is Landscape Park Duisburg-Nord, which was discussed earlier in the proposal. In short, this park utilizes found objects on site as public spaces and forums. The main goals of this project are to create greenways and infrastructure to connect to the surrounding area, to revitalize the ecosystem, to establish community identity, and to create a development interest in the site through a strong tourism base. This large park area is obviously more than I have room for in my site, but pieces and ideas can be taken from it as ways to incorporate existing infrastructure to create a unique environment; one that is an incredibly visual and tactile experience to anyone, regardless of their prior knowledge of the site. Putting people’s minds at ease about the site’s former contamination through quirky interjections and green suggestions is the make-or-break step in further developing the site.

There are a few design debates that must be noted from the research I have done - debates that specifically apply to brownfield development. One involves the notion of whether or not the site in question should be entirely obliterated
and built up from scratch, or if it should integrate objects on site, as was done at Duisburg-Nord. A second debate involves development strategy; more specifically, since these sites are traditionally very large, whether it is more beneficial to divide them into parcels and let private developers take over under a set of universal guidelines, or to implement one large master plan piece by piece. A third debate involves the design of research/high-tech facilities, which are becoming the building type of choice for these sites. Should these facilities be designed as specific standalone entities, or rather as something to reflect the identity/culture of the city that can be flexible and adapt to change and growth?

Several architects and other professionals have offered their proposals for resolving these debates. Peter Eisenman views the industrial site as a palimpsest, and says that developing a brownfield site is not a linear process, but instead these sites consist of layers of historical significance that cannot be overlooked. Robert Smithson views the earth as a medium for discovery and the buildings
on site as an "indicator of time," and most importantly that human intervention is just as natural as anything else "natural" on the site; old factories should not be hidden. Renzo Piano views the brownfield site as the polar opposite of the city itself, with the site being unstable and the city being stable. He feels that bridging this gap is critical, and that this "mutation" and "mixing of memories" is what creates interesting architecture, as Eisenman has also seemed to imply. Things like character, site history, and other intangibles should be focused on to mine the site to itself for design clues rather than falling back into a "style," as so many suburban and exurban research parks tend to do since they are so detached from everything. Lastly, Himanshu Parikh views these sites as an "urban net" and that they actually share commonalities with the city, and are not in fact the city’s opposite as Piano would suggest. Viewing these sites as a "patient" and not the "site of disease" will lead to a more open-minded design approach.

The last major idea to be taken out of my research thus far is the notion of incorporating the "creative class" into
these new neighborhoods, as outlined by Richard Florida in several of his books. Florida sets out to prove that cities that are not on the “cutting-edge” tend to lose the economic battle. For a city to be successful, it must be open to new ideas and must have an identity that changes with the times. Florida argues that there is no better way to do this than to accommodate a young group of people that value innovation over tradition, a group that makes up over a third of today’s society - the creative class.

Florida defines this class as a fast-growing, highly educated, young, and wealthy class of people who typically have jobs in the high-end technology, entertainment, finance, and artistic fields. These people value and crave creativity, individuality, independence, easy adaptability, diversity, quality of place, variety, active lifestyle, intellectual stimulation, uniqueness, and authenticity. It is important for employers to adapt to this powerhouse group of people, rather than the other way around, for cities of the future to be successful. They are the major demographic in today’s society, and
because they tend to pass their values on to their children and are prone to risks in the workplaces, this class should have a huge impact on the economy for decades to come.

Rather than using my large brownfield site to build large box retail, stadiums, and shopping malls, or worse yet to mimic the modern suburban office park, Florida’s strategy for success coupled with some of the aforementioned architects’ ideas seems to be the perfect marriage. I intend to use this research to create a community catering to this class; a self-sustained yet contributing node in the city. Combining all of these ideas will create a coagulate of new technology and existing historical elements in a way that builds character, and is not “Disney,” or in other words, artificial. In time, this community will increase land values for the surrounding area. Florida stresses the establishing of an identity and a formula for success that is dependent on the culture of each city. Creating an all-encompassing community rather than catering to the needs of the developer will look to show to the United States that “all are welcome here.”
[D: proposal] My hypothesis is that, while redeveloping these large urban brownfield sites in American manufacturing cities is important in itself, a general process should be implemented, rather than to have it be filled in randomly by large developers. In my case study, I propose studying a certain brownfield area and laying out a large site and development plan to provide for growth in phases. With a general growth plan in place, former urban brownfields have an opportunity to become niches or communities that are economically and socially connected to a city, rather than just random and overbuilt retail nodes. This thesis looks also looks to weave in two contemporary trends: (1) a growing interest in adaptive reuse and “green living,” as shown in my precedent/literature reviews, and (2) the growing need to accommodate the contemporary American worker - the young skilled professional who craves identity, purpose, and a sense of belonging. Developing an urban brownfield provides a chance for community involvements in both a massive cleanup effort and for input on building
preservation design charrettes, and also a unique opportunity to create a vibrant cultural community that is near the downtown - an area in which the young professional is the most prevalent occupant.

Using Milwaukee (more specifically areas referred to as the Menomonee Valley & 5th Ward) as a case study for my thesis, I plan a large-scale attempt to revitalize a substantial chunk of former manufacturing property as a live/work community for the “creative class” of the city. The plan capitalizes on two nearby research universities and a booming condominium market in Milwaukee’s downtown to help coerce skilled workers to this new self-sustaining cultural community. By catering to the emerging hard-working, young professionals who thrive on urban vitality and a sense of place, this formerly derelict site can prove to be crucial to the city’s economy and social well-being because of their uniqueness and proximity to the downtown.

Several design principles and/or urban planning ideas that will be very important in the creation of this new semi-urban community:
Cleanup and public acceptance is the important first phase. This is where I will look to implement ideas from all my precedents. These projects were intended to be both large cleanup efforts and unique ways to allow the public to become comfortable with a site that was once contaminated. Through the creation of a stormwater management park or a network of parks, natural marshland, public plazas, and a public transit system, citizens can see first hand that the municipal government is making an effort to improve this area, which can in turn entice developers, planners, and architects onto the site.

Site planning and zoning is the crucial next step. A series of guidelines and prototypes need to be created to determine a level of character that would be appropriate to the area; i.e., street widths, building heights, and location of
natural elements. Everything built must emphasize a sense of place and scale by centering on the natural elements and/or public transit system, with the main focus being on the streetscape rather than the buildings themselves. This project is ideally envisioned as its own self-sustaining community, with a link to the downtown through a light rail or streetcar system. This is the area of the project in which the writings of Richard Florida and his discussions of successful “creative class communities” are vital.

(3) The economic heart of the community will be a research-oriented complex that will cater to the contemporary American workforce and will architecturally and technologically push Milwaukee into the creative forefront. The other major node in the project will be an intermodal transit hub, which presents an opportunity
for local residents and nonresidents to mingle. These will be designed, at the very least, in massing form, as they will be the two key anchors of the site.

(4) The final stage of the project will involve the design of “typical” circumstances in this community, as in what a typical rail stop, street section, marsh/park, and/or public plaza may look like. This final portion looks to confront the question of how to keep this community unique and secluded in its own right, while still making it feel as if it is part of the city, whether that is through architectural suggestions or by other means. This concluding phase looks to combine all research done up to that point.

Through these four specific phases, this project can be managed in such a way in order to ensure itself as a feasible design solution in an urban brownfield site.
All four phases of my design process will keep adaptive reuse and “green living” in mind. As this is a broad term, I mainly look to implement this concept in regards to how stormwater is managed, how the site itself works as an environmental safe-haven for wildlife and plantlife through marshland and reserves, and lastly by renovating existing buildings for re-occupation or as artifacts/ruins in a park setting. I intend to use all of my precedent research to appropriately determine how and when adaptive reuse, marshland, artifacts, etc. will be used throughout the site. On a project of this scale, it would be too tedious to address the design needs of every single retail and residential building, but taking into consideration that this will be an energy-efficient community is relevant. The primary challenge will be combining the practical notions of an efficient community, an energy-efficient research facility and transit hub, and an exceptional stormwater landscape, with the interests of people I am looking to accommodate: the creative class. Given their tendencies towards innovation, efficiency, uniqueness, and
Ultimately, the culmination of all of the aforementioned ideas and concepts will result in the design of an urban village that can operate as a self-sustained community or node in the city, but is also connected to its surrounding areas socially, physically, demographically, historically, and architecturally. The program will include various spaces to sustain a year-round live-work community geared towards young professionals. Despite my focus on the “creative class,” I will certainly look to approach my design/program in a way that is appealing and beneficial to all walks of life, mainly through an array of historical references and commercial draws. Through my research of various authors who studied the concept of “urban village” and communities, particularly Florida, Oldenburg, and David Sucher, the demographic group that I look to capitalize on, as well as the site’s location, make an interactive urban community seem extremely viable as the most logical choice of program, the
details of which will be discussed later.

The site for my thesis is located in Milwaukee WI, specifically on a 50-acre plot of land located about a half-mile southwest of the heart of the central business district. With there being over 300,000 brownfield sites in the Midwest alone, I could have designed my urban village just about anywhere, but Milwaukee was the obvious choice for me because I was born and raised there. I also attended undergraduate school in Milwaukee, and thus am very familiar with the infrastructure, architecture, and character of the entire city. Milwaukee has the 8th lowest number of “creative class” workers out of 49 cities of 500,000 people or greater (Florida 191). However, I would estimate that at least 50 percent of these “creative Milwaukeeans” inhabit areas directly adjacent to my area of study, which is the main reasoning I chose this brownfield site in particular. I certainly do not expect my design to spring from nothing, nor to occur in a vacuum, so I was extremely selective with my site so as to foster new growth and connections using some key ingredients. In choosing a site
near two prominent universities, the Menomonee and Milwaukee Rivers, the CBD, and the largest concentration of historic buildings and young professionals in the city, I hope that a “creative class” community can flourish on my site as they do in all of these nearby areas.

The areas of Milwaukee that my site falls into are the Menomonee Valley and the 5th Ward. The Menomonee Valley is an extremely large, low-density area that separates the north and south sides of the city. This was the original area of inhabitation when the city was first settled by Native Americans (Menomonee tribe), and was originally covered with abundant rice fields and marshlands, with large bluffs on either side; hence the name Menomonee “Valley.” In fact, Menomonee means “rice eaters” and Milwaukee means “the good land” in Algonquin, one of the native tribes. This was the location of the first trade posts in the Wisconsin Territory when white tradesmen came through, and it was surrounding this fertile land that the three men credited with founding Milwaukee began formalized settlement in the 1830s – Byron Kilbourn (Kilbourntown), Solomon Juneau
(Juneautown), and George Walker (Walker’s Point).

Although these three men hated each other, their three settlements eventually combined to form the city of Milwaukee in 1846. The animosity these men shared can be seen today in the three grids of the city. Kilbourn’s village (north of site) ran on a typical NS-EW axis, Walker’s original settlement (south of site) has its primary streets running parallel to the lake, and Juneau’s village (northeast of site) is skewed 5 degrees counter-clockwise; this was done in the hopes that these three settlements could never be connected by roads and would be seen as distinct. Block sizes are slightly different in these three areas due to the three different grids.

After official settlement occurred, these three areas, as well as the Valley, all began to take shape. Because of the Valley’s proximity to the lake/rivers and its strategic positioning between St. Paul and Chicago, it was seen as having major potential as a transfer point of goods, and so the infamous Milwaukee Road freight line extended through this area in the 1880s. It would remain merely a
transfer point until the turn of the century due to the unstable marshlands underfoot and around the tracks, and no real industries flourished there. In a major city initiative, due in large part a huge 1899 fire that wiped out most of the 3rd Ward, a major Great Lakes shipping center at the time, the Menomonee Valley would lift the city from the ashes as the Milwaukee’s new industrial nucleus. The large bluffs flanking the valley were used to fill the marshlands as much as 90 feet in some spots. By 1902 the site was entirely leveled and a couple of man-made canals were all that remained of the Menomonee River, although it is still referred to as a “river” today. This allowed for two things: (1) factories could be built to help Milwaukee’s slowed economy, which in turn allowed the site to actually produce the goods that were being shipped through, rather than to merely distribute them; (2) the north and south sides of Milwaukee could now be connected to the Valley.

These northern and southern areas that were now uncovered would become, and remain today, some of the most vibrant residential neighborhoods in
Milwaukee - Pigsville, Brewers Hill, Beerline B, and West Milwaukee just to name a few. These were the neighborhoods where the factory workers commuted to and from everyday from the early 1900s well into the 1950s. Proximity to rail and canals, and eventually the freeway system, plus not to mention the vast expanses of open land, allowed industry to flourish in the Valley for about a half-century. Even through the Great Depression, Milwaukee held one of America’s highest employment rates due to the overwhelming success of this area. Factories, breweries, foundries, tanneries, and manufacturing plants dominated the landscape well before any skyscrapers came in, and they began producing some of the things that gave Milwaukee identity and put it on the map – bricks, beer, machine parts, motorcycle engines, leather, and cement. The soil in the area at this time was almost like clay, cream-colored and comprised of 40+ feet of marshland topped with silty, sandy dirt from the bluffs, allowing the cement and brick factories of the area to create truly original and homegrown products, hence Milwaukee’s original nickname, “The Cream City.”
Brick and Cream City Cement were used to rebuild much of the 3rd Ward in the 1900s and 1910s, giving the area a distinct look and the buildings a unique color.

By the early 1960s, decline began setting into the area rapidly. The undesirable smells and fumes given off by the factories caused many viaducts to be built over the valley, thus disconnecting the two ends once again. Industrial waste and leakage from train crashes/spills seeped into the soil gradually, if it was not already dumped into the canals first. Portions of the site were even used as a landfill for almost 30 years. By the 1960s, many of the factories began falling under due to Midwestern competition ignited by the building of freeways; trucks became desirable over rail transport. Some factories moved to Walker’s Point where most of the “cleaner” manufacturing was, and by the 1970s all factories that had not already left were forced out by technological obsolescence and/or low product demand. During the 1980s and 90s, all that remained were a couple operational factories and the Brewers’ baseball stadium on the far west end.
Through the efforts of strong municipal legislation in the late 1990s and a growing concern for sustainability, interest has been greatly invigorated in the Menomonee Valley. Mayor John O. Norquist, in office from 1988-2004, took major strides towards the actual and perceived improvement of the area. He had a big hand in getting the canals cleaned up, getting a new stadium built, increasing accessibility to the site (including a dazzling new 6th Street Viaduct bridge), and enticing developers with TIF funds and reimbursement for cleanup costs. He was the founder of the Congress for the New Urbanism, a strong anti-freeway and pro-pedestrian advocate, and always had a strong focus on the built environment and infrastructure of Milwaukee. His radical views helped the Valley start to rise from the ashes late in his tenure.

By the end of Norquist’s run in office, major infrastructure improvements were made, a large bicycle trail was carried through, a few major businesses had moved in (Potowatomi Casino, Palermo’s Pizza, Harley Davidson Museum proposed for 2008), and citizens again began buzzing about the great potential for the Menomonee Valley, for
many of the same reasons the site was originally coveted – nearby residential neighborhoods, freeway/rail/canal access, large expanses of open land, and proximity to the downtown. The 1200-acre valley exists today as a hodgepodge of open spaces, defunct and functional factories, and tourist destinations. The Menomonee Valley now smells of promise and opportunity, rather than reeking of factory smoke and economic decay. Like so many other brownfields in the Midwest, there is still a lot of work to do, but with the right incentive, the right administration, and a little imagination, the Valley can remind Milwaukeeans of the rich history and prosperity it once had through new development.

As already mentioned, Walker's Point to the south of my site would eventually develop as a light manufacturing area throughout the early to mid-20th century. Today, it contains Milwaukee's largest concentration of gays and Hispanics in Milwaukee, and is experiencing a condominium influx, as is most of the city. Walker's Point, in conjunction with the 3rd Ward, combines to form Milwaukee's two oldest
neighborhoods and contain thriving artist/design communities. 3rd Ward is substantially more “chic” and high-end than Walker’s Point, but both are vital to the cultural community of Milwaukee. Both exude the rich character of former shipping/manufacturing districts being reborn through the arts and adaptive reuse. These two neighborhoods contain the majority of Milwaukee’s “creative class,” and what Richard Florida would consider to be the key ingredients to the success and vitality of a “new” neighborhood - large workbase of young professionals in a variety of technical and artistic fields, diversity of sexes/races/orientations, reuse/authenticity rather than mimicry, lots of activity at all times, and proximity to the central business district (Florida 21-24).

This leads into the specific site itself. About half of its 50 acres sit in the far eastern end of the Menomonee Valley (the “peninsula” in above photograph), with the other half resting in an area that is technically a part of Walker’s Point, but is known to locals as the 5th Ward. It is surrounded by Marquette University and downtown to the north; the 3rd Ward and the Milwaukee
Institute of Art & Design to the northeast; the Milwaukee River, Harbor View, Jones Island, the Summerfest grounds, and Lake Michigan to the east, and the rest of Walker’s Point (primarily residential) and the Menomonee Valley (primarily vacant/industrial) to the west and southwest. About half of the site has been bulldozed and/or untouched. Several cement/brick factories used to sit on the peninsula, with two still standing (St. Mary’s and Lonestar). An abandoned tannery is all that remains of the industry in the 5th Ward.

My site actually extends slightly outside of the photograph shown above, as I intended to reuse some of the existing surrounding context in some way. These existing buildings exist today as an Amtrak station/post office to the north, the Milwaukee Sewage District in the center, and about seven blocks of underutilized and/or abandoned 2-5 story brick buildings; all were built between 1899-1929, and are mostly privately-owned warehouses that were at one time chemical plants or breweries. As mentioned several times, the brownfields in the Valley have been coveted in recent years due to nearby
amenities, and this site is no exception. The Menomonee Canals, Milwaukee River, an Amtrak line, the Marquette Freeway Interchange, two major roads (6th St & 1st St), the Hank Aaron State Trail, and the Milwaukee Riverwalk all run through or adjacent to my site. Because of this, my site has the potential to utilize all of these transportation modes as a means of connecting the artist communities to the north and south, as well as the campus and downtown areas, physically as well as culturally.

The historical and infrastructure analysis of my site is extremely necessary to flesh out in order to establish and understand a proposed program for the site. The program for this thesis is very related to and contingent on the cultural nodes of the 3rd Ward and Walker's Point, the history of Milwaukee and the Menomonee Valley, the multi-modal nature of the site, and the demographic makeup of the surrounding areas. Although my thesis wants to assert that there is a universal solution for the problem of urban brownfields, in that a “creative class” urban village is most desirable and useful in all situations of similar
criteria, the implementation of each solution must be site-specific and reflective of each particular city's character, statistics, and amenities. Therefore, it was very important for me to pick a site and get to know it thoroughly before I delved into any program issues. Everything I subsequently propose as potential programmatic elements required seemingly little effort on my part, because my knowledge of the site, the success of the 3rd Ward, and my understanding of what an urban village have dictated to me what should be put on this site.

Therefore, the program being proposed is typical of what would interest the “creative class” and what is currently working well in the 3rd Ward and Walker’s Point nearby, all injected with site-specific flare. Based on a lifestyle analysis of the “creative class” and Ray Oldenburg’s book on “third places,” a large majority of my site will contain flexible spaces. “Flexible spaces,” in this case, refers to buildings that blur the lines of street and building so as to create large interconnections of social space. “Building” is the variable in this equation, and “street” or “space” is the
solution. The buildings could be anything – pub, restaurant, music store, book store, café, or any other kind of “third place” that young professionals value – so long as these places do not distract from conversation, but rather encourage spontaneity and community.

As previously mentioned, so many large-scale developments fail on brownfields because they utilize entertainment complexes, malls, and convention centers to draw crowds and commerce. The problem with these is that they do not promote year-round economy, do not foster more development, and are destinations rather than community anchors (LeRoy 157). With that being said, my program can be looked at in more general terms, as what not to build instead of what to build. The “creative class” values individuality, flexibility, authenticity, activity, and indigenous street culture – everything that a Wal-Mart or a shopping mall or stadium cannot provide. These people want music to happen on its own, not to have to pay for concerts at stuffy theatres. They want to taste the unique local flavor of the community, not to eat at Applebees or have coffee at Starbucks. They want
flexible, challenging, meaningful jobs, not to be drones in a corporate workplace. They want “anti-generica” (Florida 140).

It is easier for this program to unfold if it is understood what would not work, rather than to test out random elements that may or may not work and have them fail. With that being said, at this point I am unsure of exact square footages or how many of what I have, but I am not convinced that this has to be determined. This development is to be about the spaces and the places more than anything - the “Great Good Place” outlined by Oldenburg and the “Great Street” outlined by Allen Jacobs. In now understanding what kinds of things are deterrent to good socialization - namely static, generic, and overly-corporate establishments that are more introverted than extroverted (Oldenburg 18) - I can focus more on designing the “good” spaces rather than worrying about what they are so much. This is an important concept to Florida, Oldenburg, and Jacobs.

For example, the reason the Pearl District is such a great precedent is its streetlife and spatial quality; one never reads an article on the Pearl
District exalting its great architecture, because frankly it has none. But nobody notices this—why? The Pearl District is social, playful, and charismatic. If a street or place is fun and encourages social and cultural growth, it makes no difference if it is a tool shed or a $300 million Frank Gehry building. The clearest way I can phrase the majority of my program is “socially conducive spaces that may or may not rest inside a building.” The space is the function and the focus, not the residual, and whether it takes a bar, café, lounge, or diner, it doesn’t particularly matter. People of the “creative class,” and most active people for that matter, will flock to where the conversation and activity is (Oldenburg 272).

I know from research and intuition what are not social spaces, and I can go from there. Oldenburg outlines cafes, coffeehouses, taverns, beer gardens, bistros, and diners as typically exceptional “third places,” but there can certainly be others. The 3rd Ward is a successful artist community full of what I would consider to be good third places, and places that are valuable to the “creative class,” such as art
galleries, high-end home furnishing stores, photography outlets, antique shops, tons of small restaurants and specialty shops, and a moderately-sized public market that sells homegrown/local products. All of these things seem to work there, as well as in Walker’s Point, and since the market is there for these places in Milwaukee already, providing some similar programmatic elements would certainly help to connect these two areas. A few types of sociable places not outlined by Oldenburg or seen in the 3rd Ward are small music shops, bookstores, and interactive multi-use parks. These three things all ring true for Richard Florida, and were also successful pieces in all of my researched precedents.

In conclusion, based on my site and program analyses, a quantifiable program for my thesis is:

1. Stormwater Park/marshland in conjunction with Milwaukee Sewage District building; used in Pearl District and Newington, Australia as ways of dealing with on-site drainage and as a functional way of recycling and reusing water within a small community; also a reference to marshlands on original site 150+
years ago and to how the site was remediated; integrated throughout site and not concentrated in one specific area.

(2) research/technical facilities as major source of employment for nearby and in-state graduates, perhaps used in conjunction with Marquette campus; jobs would include “creative class” type work as outlined by Florida (software, R&D, advertising, video games, design, film, publishing, biotechnology, music, etc.); building(s) serve to educate, “be green,” and employ; seek a high-tech vernacular, as reference to glory and innovation of past industry of the Valley; buildings take over some space from unused cement factories and sheds on western end of site (Powell).

(3) intermodal transit center - connection to 3rd Ward road trolley, Amtrak line, Hank Aaron State Trail, Riverwalk, Canal/2nd/1st Streets, Milwaukee/Menomonee Rivers; reference to Milwaukee Road; contains parking garage below; serves as “keynote building” on eastern edge of site due to its

Green roof on Milwaukee Metropolitan Sewage District Building (on site); view northeast to downtown
positioning where rivers meet and view to lake

(4) majority of new construction constituted of 2-5 story mixed-use buildings and 8+ story residential towers overlooking marsh/canals; contain aforementioned “social spaces”

(5) “gray area” - local flare, but may be a destination for “outsider Milwaukeeans” who are interested in the culture and history of Milwaukee; looks to respect the urban village while allowing for tourism, diversity, additional commerce, and something interesting to do for people using the transit hub - distinctly separated from rest of neighborhood; places for locals and outsiders to meet; this area includes:

(a) Harley-Davidson Museum proposed for 2008, or a portion thereof; interactive; building to utilize existing warehouses on site; located on Valley peninsula

(b) Sewage District site; hedged/tree-lined area to north and west of the buildings, can be used for
fishing, which is popular at this site now; bike shop, bait, auto repair, and adventure sports stores/market to work in conjunction with hub across the street; Valley/Milwaukee souvenirs, small museums
c) Brewery District; renovate and reuse as many usable existing buildings as feasible, integrate with businesses east of 1st St; use space under train bridge as pedestrian street that connects into hub; has some sort of beacon or tower on south end where most traffic will arrive from

(6) Miscellaneous
(a) multi-use public spaces
(b) range of housing sizes/affordability
(c) in general, design focus on the streets
(d) lots of “third places” (Oldenburg)
(e) new façade treatment on Post Office building so as to engage Riverwalk (Powell)
General site plans, axons, models etc. of my specific area of study will be produced first in order to understand spatial arrangements and how things work in conjunction with transportation routes. The project will also include marshlands as an element for sizable site drainage, water recycling, and how future pollution can be prevented, not only for environmental reasons, but also for purposes of gaining public acceptance and to give the site a sort of “timeline of character,” as implemented in the previously discussed precedents.

Extensive research will be done to determine the most appropriate zoning and need for the area, and finally, this project will culminate with a more detailed design of the proposed intermodal transit hub, as well as “typical” conditions such as streets, districts, live/work buildings, parks, “third places,” etc., represented in section models and detail models. The main goal with the final design product is to design a community that blends aspects of my brownfield research with aspects of my urban village/creative class research in a cohesive way at various scales.
Each step of this design process will utilize various methods of production and physical manifestation. Designs involving the first phase - public acceptance and site cleanup - will most likely assume a lot of things, meaning that for purposes of the project, this site will already be assumed to be decontaminated and will not be something I will specifically address. Despite my intentional neglect of the mathematic and scientific details, the architectural remnants and suggestions are very important and must not be overlooked. I do not find it to be beneficial to “work from a clean slate; some initial renderings and photographs of how the site may look before, during, and after cleanup would certainly be beneficial for purposes of character and design. I am looking to design the ongoing “green” aspects of the site such as marshland, adaptive reuse of existing structures, and habitat revival zones. Site plans and relationship diagrams will help to detail how these “environmental activities” will coincide with “social activities” on the site in cases in which it is not already inherently obvious.
A site model will follow, in order to show an overall scheme and concept, and to the extent that this relates to different parts of the city. The design of specific architectural elements, such as streetscapes, the hub, and other buildings, will rely heavily on massing models and sectional details. Ideally, time will be balanced between a model of a "keynote" building, most likely the intermodal transit hub, and models/sections of the remaining site and streets. I am using the first quarter primarily for research, sketching, and developing site/program; then, beginning to design at an urban scale down to a street scale in the second quarter; and finally, to get into as much detail as I can by the third quarter before I start producing final models and renderings. My desire to attack the design process from a large city scale down to eventually a building scale implies a linear process, but in actuality it will be quite cyclical; any detailed decision I make will influence some urban decisions, and vice versa. Ideally, my final product will be a massing site model, a detail model of a building or block, street/place/building character sketches, materials and image
collages, diagrams, and some typical street sections.

The main idea that will drive my design decisions is attention to scale. On a site level, I look to infuse the surrounding city grid, figure ground studies, character, and buildings. On a broader context level, transportation is the main concern, how the site is accessed on multiple levels, and how these levels converge. On the broadest level of city, density and demographics is the concern; connecting the 3rd Ward, Walker’s Point, and the Marquette campus area physically and programmatically was my original reasoning for choosing this area of Milwaukee, and I certainly want that to be reflected in the end product. Other design goals that stem from these three scales are:

1. Reference history of Milwaukee (Menomonee Valley, Third Ward)
2. Strong relationship between transportation modes
3. Connect Walker’s Point and Third Ward
4. Improve riverfront and waterfront activity
5. Incorporate marshland and existing buildings
6. Pedestrian-oriented, young professional community
(7) vivacious streetlife; emphasis on street design

(8) extension of city grid; small block sizes

(9) offer a unique atmosphere unlike any of Milwaukee’s other neighborhoods

(10) mix of tourist and residential spots; identity of place and civic pride

I will also read books and articles and search for new village design precedents as new situations arise. I will also try to acquire more urban brownfield precedents as needed, so that I can further build credibility for my hypothesis of incorporating a neighborhood onto a dead site. I am in a comfortable spot right now in terms of site information and history, due to not only my previous knowledge of the site, but also from several visits there in which in-depth documentation has occurred in the form of photographs, sketches, notes, and discussions with property owners and the Milwaukee DCD.

Upon implementation of this thesis, I feel that the Menomonee Valley in Milwaukee can once again become one of the major employment hubs of the Midwest. This new live/work destination will successfully replace the blue-collar apprentices and skilled craftsmen
of yesteryear with the contemporary workers that offer a wide range of technical skills and a large salary base to circulate through the local economy. Through application of contemporary advancement in contamination cleanup, operational technologies, and large-scale community construction, this thesis will have the long-term goal of engaging other blighted areas of factory cities to spread the word and follow suit.


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Milwaukee Department of City Development. Internet. 2007: On-line <www.mkedcd.org>


