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I, Drew J Cornedi, hereby submit this original work as part of the requirements for the degree of Master of Architecture in Architecture (Master of).

It is entitled:
The Densification of Historic Districts: Applying Metabolism to the Cast Iron

Student's name: Drew J Cornedi

This work and its defense approved by:

Committee chair: Aarati Kanekar, Ph.D.

Committee member: Michael McInturf, M.Arch.
The Densification of Historic Districts:

Applying Metabolism to The Cast Iron

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By Drew Jason Cornedi
Bachelor of Environmental Design, Architecture, 2006

Chairperson
Aarati Kanekar

Supporting Chairs
Michael McInturf
Edson Cabalfin
Support and Patience;
Thank You.
Due to the natural borders that limit the expansion of Manhattan, an estimated ten percent increase in New York City population over the next twenty years will constrict the island’s developable land and threaten low-population/under-developed areas, which include a portion of the fifty-two protected historic districts. The South of Houston neighborhood (SoHo) and its stock of cast iron structures, some almost 150 years old, falls into both of these categories. The Cast Iron District marks influential transitions from traditional masonry into modern steel construction and from the process of manufacturing individual parts to the mass-production of multi-purpose (structural, weather barrier, decorative) modular building components. Plans for population expansion are already partially laid out, compiled in the city-released document “PlaNYC” but do not include specifics about historic districts. Historic preservation has become a method of protecting important buildings from demolition but creates limitations for their adaptation. The alteration of historic buildings is subject to stringent regulation, especially the exterior, limiting the amount of change that can occur. Increasing population will force either the complete redevelopment of underdeveloped land or adaptation to the new context of the city.

Attempting to work within an ever-changing built world, groups of architects, most notably, the Japanese Metabolists of the 1960’s began to explore what future cities would look like. They conceptualized premanufactured blocks inserted within a framework where an entire building or parts of buildings could be added or removed with demand. The Metabolists tapped into an idea that could be applied not just to whole cities and megastructures of the future but also to the existing fabric of cities through interpreting a building as framework, a historic building
holds the potential of adapting with the surrounding city. SoHo, with its history based in multifunctional, premanufactured, modular parts and historically preserved low density provides an excellent case study subject. Through the application of Metabolist ideals to one building, an adaptation concept will suggest how SoHo might develop to keep up with changing demands of the city.
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Introduction

Why Densification?

Attempting to revitalize and maintain locations of historic significance, many cities in the United States have utilized historic districting to revive the failing and fallow industrial, residential, and urban sections in their cities. The strategies employed have been effective thus far in many of these areas, including the South of Houston (SoHo) neighborhood, also known as the Cast Iron District, of New York City. While this method has been successful in the stabilization and even the recovery of many areas, it does not guarantee perpetuity of success and protection for the future as population growth in cities pushes property value above the historic value of the buildings in question.

The cast iron buildings of SoHo, specifically, represent one of the oldest building stocks remaining in the city of New York, is the largest remaining collection of cast iron buildings in the United States and is one of the earliest examples of widespread modular/premanufactured building principles being put to use in
construction. The structures in the Cast Iron District have been able to remain relevant for over 100 years because of their structural stability, open floor plan model and the artistically designed public face that all add to an inherent flexibility for various programs. This is both a blessing and a curse for their future; the age of the district has helped prevent the modernization of archea zoning laws and the beauty of the ornate structural façades have, thankfully, aided in the rescue of the neighborhood from neglect and demolition but have also forced the stringency of historic preservation on all of the cast iron buildings. Combined, the restrictions placed on SoHo have forced a ubiquitousness in program and limited both the population and building (available square footage) densities.

Before being developed, SoHo was referred to as “The Valley”\(^1\) due to its low-lying natural geography. Today, SoHo has returned to those natural roots in the built environment by becoming a density depression between the development of Downtown and Midtown skyscrapers, the re-purposing of old industrial and new construction of large-scale buildings to the west in Hudson Square, the Meat Packing District and Chelsea, and potential future development from the new World Trade Center through the reconnected Greenwich Street corridor up the west side. According the far-reaching action plan for the successful future of New York City, PlaNYC, estimates predict that in approximately twenty years the city’s population will rise from the current 8,175,133\(^2\) to exceeding 9,000,000.\(^3\) With the increase, the boundaries of the city will push further beyond acceptable commuting distances while Manhattan real estate becomes more valuable, either choking out large populations integral to the operation and wellbeing of the city or forcing protected areas, historic and otherwise, to densify beyond current capacity.

The conjecture to be explored is this: can architectural design incorporate historic buildings while anticipating the needs of a denser neighborhood, potentially creating a palimpsest of the past, present and future together in one place. Analysis of building typology, historic urban fabric, expressed needs, potentials and current historic districting practices, will provide programmatic suggestions of what SoHo needs in order to maintain the successful trajectory it has built in the past.

Methodologically, the incorporation of conceptions for future cities from 1960’s theorists, such as the Japanese Metabolists and the collective known as Archigram, who suggested a modular and adjustable architectural framework that works in accord with changes in need, population and emerging technologies. These are typically based on a ‘closed system’ that becomes proprietary to the building it is applied to. More recently, on a smaller scale, firms such as Kieran | Timberlake have been exploring modular building within a framework. The purpose, however, differs from Metabolism and aims for extended control over an ever-quickening and less accurate building process through constructing building blocks in a climate controlled environment that are delivered to the building site. Theoretically, the finished product is closer to what was designed within the computer environment and separating natural variables

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3 U.S. Census Bureau: State and County QuickFacts, New York (city) QuickFacts

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that are inherent to the natural environment. Standardized parts are also used in order to make installation as simple as possible but, collaterally, adds the benefit of infinite possibilities for replacement/expansion/dynamic-adjustment. Though the former seeks adaptability within the context of the structure itself and the latter desires adaptability to uncontrolled elements, both employ some form of standardized parts to achieve their goals. Through a critique and subsequent application of the influential foundations to a case study building in the heart of SoHo, this thesis aims to explore an adaptable system for a continuously fluctuating population that incorporates the existing premanufactured historic architecture with a new framework to create a pastiche of old and new.
Henry Hudson, employed by the Dutch East India Company, landed on the island of Manhattan in 1609 in the search of a more direct route to India rather than around the southern tip of Africa. He and the following settlers began interacting with the native Algonquin and Iroquois Indian tribes, among others. The realization that the area could be very profitable because of the plentiful beaver population and value of beaver pelts spawned the planned settlement of New Amsterdam by 1625. The Dutch engineer Crijn Fredericxsz was sent with instructions for an organized gridded plan for the settlement, which quickly discarded in favor of a more organic form that was informed by the two flanking rivers. Due to the profitability of the fur trade, the population

**Figure 02.01:** Castellio Plan for the early settlement of New Amsterdam.

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grew steadily and unsettled lands were designated with ownership for farms and gardens. By the 1640’s, the land that is now known as SoHo, or South of Houston Street, was a woodland swamp with a small collect pond owned by Dominic Everardus Bogardus, a clergyman and first minister of the colony. Development north continued along the East River but Bogardus’ land remained largely unoccupied due to the swampland it contained and, after his death, was slowly consumed by the progress of the town.

In 1644, a group of 11 freed slaves occupied the land and were granted the right of land ownership though, after a revolt in 1712, this right was removed. The area was used for gardens and orchards while much of the other swamp lands were filled in and used for development. 1728 saw more people moving north from the crowded streets and by 1745, most of the area was inhabited, though sparsely. By 1769, Broadway was fully planned and cut through the swamps northward but development was stalled due to the Revolutionary War. Rebuilding occurred following the destruction caused by the war and growth began again; Broadway proved its popularity and economic viability and was graded in the 1780’s. A canal was dug in an attempt to drain the collect pond for more developable space in 1791 habitation reached what is now Houston Street (the northern boundary of current-day SoHo) by 1796 where modest federalist style homes were erected. Dry goods sales, retail stores, and elegant shops lined the street with an arched bridge connecting north and south over the collect pond’s drainage outlet to the Hudson (presently Canal Street and the southern boundary of SoHo). Broadway became the bustling

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6 Horberger, The Historical Atlas of New York City, 46.
spine of commerce by 1805 and a major vertical connection for Manhattan. In 1811, a plan for the rest of the city was released, a net of gridwork laid out over Manhattan in the Commissioners Plan, which allowed only twenty to twenty-five foot frontages for each plot and open spaces were sparse, if at all present. It is of note that neither Washington Park nor Central Park are present; they are replaced by a smaller open space somewhere inbetween. From the years 1820 – 1860, New York’s population sprung from 123,706 to 813,669, or over 17,000 people per year, consistently shifting the city’s center of mass, with Broadway as the constant. Due to the increasing population, goods, services, and entertainment boomed. SoHo became more and more popular as the center of the city for a short time and it became the home of many theatres,
opera houses, and music and dance establishments. Soon, several factors would influence the development of SoHo as the cast iron enriched neighborhood it is today. First was the fire that occurred in 1835 south of Wall Street, where much of the dry goods business was conducted, primarily centered around cotton; second was the development of the Hudson River docks when the East River could no longer accommodate trade vessels with increased depth requirements; third, the continuous climb of the city center up Broadway; fourth, the installation of two train depots in 1853 and 1867 that allowed transportation of goods from SoHo to the western docks; and finally, department stores near and above 14th Street began shifting commerce northward and leaving prostitution to drive away the remaining residents. The area was ready for James Bogardus who, in 1848, built the first cast iron building in New York City and SoHo, then known as the Valley, which was quickly established as one of the first manufacturing districts in the United States. The manufacturing population of women and children’s garments and wholesale fur trade was supported greatly by the inexpensive labor of the residents that lived in the tenements of the East Village, within walking distance of SoHo.

Today, the district has survived, despite adversity because of several factors and the buildings remain as the largest cache of cast

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Figure 02.10: Historic usage and construction insurance map.
iron buildings in the world. First of all, cast iron construction allowed easy adaptability due to the open plan. Access by train, which began in the 1870’s with the installation of “El” stops on Sixth Avenue at Grand Street and at Bleeker Street 17 further allowed the section of Manhattan to remain relevant. Around 1912, the stifling “El” was dismantled and development of the subway was initiated with similar stops. 18 From the early twentieth century until the 1950’s, SoHo was primarily a manufacturing and warehouse district with shops and storefronts on several streets. As manufacturing began to move overseas, the warehouse component dominated and fires became commonplace due to the nature of the goods stored there and the district was nicknamed “Hell’s Hundred Acres.” 19 Property value decreased and occupants vacated. Infamous New York City planner Robert Moses is quoted as saying, “The area between Canal Street and Third Street, a strip three-quarters of a mile wide, is the most depressed area in lower Manhattan and one of the worst, if not the worst, slums in the entire city, a ghetto, with the rate of turnover of 14% a year.” 20

Slated for demolition as early as the 1940’s to make way for Moses’ Lower Manhattan Expressway, the threat of destruction prevented building owners from making any improvements, tenants began moving out, and buildings quickly became dilapidated. 21 In the 1950’s, artists began to take advantage of the open plan, ample natural light, and low rent the buildings provided. They were, however, living an area zoned for manufacturing and in violation of the zoning code. The artists, along with residents of other

17 Homberger, The Historical Atlas of New York City, 106.
18 Homberger, The Historical Atlas of New York City, 126.
19 Burns, New York: An Illustrated History, 531.
20 Burns, New York: An Illustrated History, 530.
21 Burns, New York: An Illustrated History, 530.
Robert Moses' Lower Manhattan Expressway would have been his largest urban renewal project. While in his mind since the 1940's, plans were developed from 1960-1980 before being denied by preservationists. This collage depicts the sectional perspective alongside the street plan for the expressway to run on Broome Street, causing a path of destruction several blocks wide and stretching the width of Manhattan.
By 1978, an estimated five thousand artists were living in SoHo; but around that time, rents and real estate values began a precipitous climb. The area was becoming more fashionable as a residential and commercial address, and many of the artists who had revitalized the once-neglected district were priced out of the gentrifying neighborhood. Upscale boutiques, galleries, restaurants, bars, clubs, hotels, and shops replaced studios and galleries, and most of the remaining small industrial businesses.

In 1980, SoHo was recognized “As the emerging center of neighborhoods affected, took Jane Jacob’s lead and resisted the clearances and were able to lobby and direct funds to subways and other less destructive infrastructure that, today, serve as SoHo’s lifeline to the rest of the city. In 1971, when the city, in recognition of the artists that were reviving the area with galleries and other amenities required for living, passed an amendment to the zoning code, called Artist In Residence (AIR) that allowed the live-work situation that the artists had been utilizing. Further revival and protection was provided when the New York City Landmarks Preservation Commission designated SoHo as a historic district in 1973, which protected approximately 500 buildings on 25 blocks. Forty galleries had been established by this time and thirty more were in place by 1976. As is documented in the 2010 Historic District Extension Designation Report, “By 1978, an estimated five thousand artists were living in SoHo, but around that time, rents and real estate values began a precipitous climb. The area was becoming more fashionable as a residential and commercial address, and many of the artists who had revitalized the once-neglected district were priced out of the gentrifying neighborhood. Upscale boutiques, galleries, restaurants, bars, clubs, hotels, and shops replaced studios and galleries, and most of the remaining small industrial businesses.”
the art world,” but “Was not simply an accident of time, place and culture but the result of the availability of a very specific kind of architecture: the cast-iron factory,” and the “Simultaneous particularity and uniformity of [SoHo’s] scale. If there is a place in New York with the dimensions of a nineteenth-century European city, this is it.” The transformation realized Jane Jacob’s conjecture that cities would organically revitalize themselves without outside intervention. SoHo resident of 240 Centre Street and former editorial director of Random House publishers, Jason Epstein, is quoted as saying, “Artists accomplished, without having intended to, what decades of urban renewal had failed to do… SoHo’s revival shows that the spontaneous generation that once characterized New York’s growth remains a possibility.”

24 Burns, New York: An Illustrated History, 531.
25 Sorkin, Michael, Twenty Minutes in Manhattan (London: Reaktion, 2009), 147.
26 Sorkin, Twenty Minutes in Manhattan, 143.
27 Burns, New York: An Illustrated History, 531.
Today, SoHo, after historic district extension in 2010, remains “A valley between the tall buildings of the financial district of Lower Manhattan and the taller buildings north of Houston Street” and stands as a testament to the building typology by not succumbing to the height and density of these other areas of New York City. The swing in use and population, however, catalyzed a reaction in popularity that propelled the now-famous neighborhood into extreme economic value, which pushed out the artists, the remaining industrial manufacturing, and the hundreds of blue-collar jobs they provided, in favor of stockbrokers, lawyers, and advertisement executives. Michael Sorkin, critic and professor of architecture writes, “The golden goose effect was incredibly swift. Although quite a few managed to cash in on the boom, artists were driven out as buildings were converted to condos. Many of the galleries were also priced out... The streets [became] jammed with people who, with no thought of art, had come simply to shop and brunch and to look at each other.”

28 Hudson, The Unanticipated City, 35.
29 Burns, New York: An Illustrated History, 531.
was created in the 1970’s remains in place and is designed to keep people other than artists out. According to Larry M. Elkin in his article on the Business Insider website, “Good Luck Becoming An Artist In Residence In New York City,” wealthy residents that moved in as the neighborhood became popular were required to sign “SoHo Letters”\(^{34}\) that made them aware of the AIR stipulation and that they may be asked to show proof of their artist status to city enforcement; the city enforcement, however, have been relaxed about the amendment until recently. The New York Times article “Suddenly SoHo Heeds Law On Artists’ Lofts,” by Christine Haughney reveals that applications for artist status have been turned down in a confusing process, preventing new residents from purchasing lofts. This has led to stricter landlords and difficulty in selling lofts; Haughney cites real estate broker Jan Hashley who has recently had difficulty selling four apartments in a twenty-two unit building because potential buyers backed out after learning about the

A 1965 to 1977 study showed that the value of a loft building increased from $45,000 at the beginning of the period to $60,000 in 1977.\(^{31}\) Today, Siim Hanja of the luxury real estate firm Stribling & Associates says that “Finding anything under $1 million in SoHo is a job,” on Sohonyc.com, a business development website for the neighborhood.\(^{32}\)

The transitions that have occurred have been beneficial for SoHo thus far but have severely limited the mixing of uses within the neighborhood. This has left the handful of artists and wealthy residents, a preponderance of retail stores, and a few restaurants and cafes.\(^{33}\) The Artist In Residence amendment to the zoning code that

\(^{30}\) Sorkin, Twenty Minutes in Manhattan, 141.

\(^{31}\) Hudson, The Unanticipated City, 39.


new stringency of the AIR law. This suggests that there are fewer residents in SoHo than there have been in the past and those that remain are wealthy enough to contend with legal proceedings over the law in question. It also means that real estate value will lower, making an apartment in the neighborhood a less sound investment, most likely resulting in vacancy of buildings or a continued increase in retail.

The current retail services that are provided are not marketed to local business but predominantly to tourists. The current mix has created an intense transient population during business hours and all but clearance of people after seven at night, leaving the streets virtually empty. This has been partially propelled by opponents of mixing uses who actively prevent businesses from staying open past an unspecified “Reasonable hour,” have rights to review business plans and have brought unsatisfactory business owners to court, ultimately shutting them down.

What has happened in SoHo is a process of human ecology of invasion-succession where a dying typology was replaced by a new one over time. This is a spontaneous reaction that happens within the larger social context of a city and becomes a search for equilibrium within that context. While the natural evolution documented is an optimistic view for forgotten neighborhoods, it can't be denied that preservation and historic districting has played a pivotal role

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36 sohobid.org, SoHo Business Improvement District: A Proposed Mixed Use BID for NYC, 1.
38 Hudson, The Unanticipated City, 120.
in the transformation of SoHo from a warehouse wasteland into an economic hub within Manhattan. While the process of historic districting can play a role in the revitalization of areas, it can also be riddled with faults, as case studies have demonstrated.

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<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Raw Food Ingredients</td>
<td>1.6%</td>
</tr>
<tr>
<td>Drug / Cosmetics</td>
<td>4.7%</td>
</tr>
<tr>
<td>General Merchandise</td>
<td>6.2%</td>
</tr>
<tr>
<td>Services (Eating / Drinking)</td>
<td>6.2%</td>
</tr>
<tr>
<td>Vacant</td>
<td>7.8%</td>
</tr>
<tr>
<td>Services (Bank / Phone / Fitness)</td>
<td>9.3%</td>
</tr>
<tr>
<td>Apparel and Accessories</td>
<td>64.3%</td>
</tr>
</tbody>
</table>
Figure 02.38: Current zoning in SoHo and Surrounding.

Zoning

Commercial Overlay

C1-1
C1-2
C1-3
C1-4
C1-5
C2-1
C2-2
C2-3
C2-4
C2-5

Zoning Districts

Zoning Districts Thematic

Residence District (Medium and Higher Density)
Residence District (Lower Density)
Commercial District
Mixed Use District
Manufacturing District
Battery Park City
Park

Zoning Map Amendment

Adopted Since 2002
Certified/in Public Review

Primary Land Use

One & Two Family Residence
Multi-Family Residence (Walkup)
Multi-Family Residence (Elevator)
Mixed Residential & Commercial
Commercial Use
Industrial / Manufacturing
Transportation / Utility
Public Facilities and Institutions
Open Space & Recreation
Parking
Vacant Land
Figure 02.39: Primary transportation corridors for vehicular traffic.
Figure 02.40: Primary areas of pedestrian activation during regular business hours, combined with a 1/4 mile walking radius and the lone “open space” that is, in reality, a walled in church-yard.
Figure 02.41: Subway lines surrounding SoHo and their stop locations.
Figure 02.42: Locations of remaining cast iron buildings within the Cast Iron Historic District and location of proposed site.
The City of New York
Mayor Michael R. Bloomberg

UPDATE APRIL 2011

In 2007, The City of New York brought many of its agencies together in order to create a conjecture on what the future would look like in order to deal with analyses that show today’s NYC population of 8,175,133 exceeding 9,000,000 by 2030, a staggering 10 percent growth over twenty years. This was an exercise to decide how the city will adapt to “A growing population, aging infrastructure, a changing climate, and an evolving economy [posing] challenges to our city’s success and quality of life,” assess the progress that has already been made as of the release of the document and creating, essentially, a wish list for the future. By focusing on several categories that have been deemed of greatest impact and further breaking those categories into steps for action, the involved New York City agencies released an extensive report; the following is a summary of the resulting contents, PlaNYC 2030, followed by theoretical guidelines formed to foster the development of Manhattan. Together, the reports will work efficiently to inform the program for a case study building.


The forecasted increase in residents has required PlaNYC to influence the development of housing in order to maintain acceptable distances to primary business areas for the largest population and maintain certain qualities of life for everyone. To do this, the first item discussed covers finding areas that have the potential to be rezoned for transit oriented development, exploring new strategies for modifying existing housing and creating new housing models and to allow these models to evolve with the ever-changing needs of the increasing population. Next, these housing projects have the need to be financed and facilitated. In order to do this, under-utilized sites will need to be used, strategies to make new units in existing neighborhoods need to be made and existing city property will need to be better used. Finally, stainability is documented as being important to the future of neighborhoods. This includes fostering more vegetation, utilizing new technologies in city-financed public housing that positively affects the ratio between cost and long-term benefits of residents, promoting walkable neighborhoods by strategically placing services for living (retail, groceries, restaurants, green spaces, etcetera), preserve and upgrade existing affordable housing and proactively protect the quality of all of the items listed above.4

4 The City of New York, PlaNYC, 21.
The primary objective for the future of City parks is to create more green space that is accessible, high-impact and promotes and protects nature. First, areas that are lacking public park space should be targeted. In order to accomplish this goal, tools must be developed for the identification of locations that would benefit from the initiative most, targeting existing under-utilized spaces to maximize cost/benefit and extending usable hours at existing sites by providing better lighting and infrastructure. Facilitation of urban agriculture would be emphasized, which would lessen the responsibility of the Parks Department. Next, an effort to create more “Destination level” parks to attract more patrons by creating and upgrading flagship parks, reclaiming landfills to convert them into parks and increase opportunities for water-based recreation. Third, an imaginative take on the public realm will activate the streetscapes to create a network of green corridors. Last, the promotion and protection of nature will aid in public appreciation and participation. The first goal is to plant one million trees. Additionally, conservation of natural areas and ecological connectivity will ensure long term health. Incorporation of stainability will also be important through design and maintenance of public spaces.\[5\]
Transportation

New York City is already one of the world's most sustainable locations due to its extensive public transportation system but continuing to develop as time goes on is important. The desire is to expand sustainable transportation infrastructure and options through an improved and expanded bus service, subway, commuter rail, ferry and for-hire vehicle services. Additional improvements would make bicycling safer and more convenient along with pedestrian access and safety. Reduction of congestion on roads, bridges, and at airports will make travelling more efficient and lessen engine idling time. Achievement could be through the testing and implementation of pricing-based mechanisms to reduce traffic and congestion and modification of parking regulations to address the needs of neighborhoods and prevent unnecessary circling of blocks. Improvement of freight movement will help reduce truck congestion in the city and improvement of import/export gateways will further open national and global markets. Seeking methods and sources of funds to maintain transportation networks will be the hinging point for physical condition of roads, buses, mass-transit network, and bridges.6

6 The City of New York, PlaNYC, 91.
Work has already begun to improve energy efficiency across the city and the first step has been to increase the planning and coordination between all departments in city government. To aid this process and begin to increase energy efficiency, the Greener, Greater Buildings Plan, outlined in the PlaNYC document, will be implemented to improve codes and regulations on sustainability of new construction and compliance for the existing. Smaller buildings must become more energy efficient as well, including historic buildings. In order to do this, the city will provide financing and information and work to attract a workforce to support new technologies with the goal of becoming a knowledge center for energy efficiency and emerging energy strategies. Plans to expand the Mayor’s Carbon Challenge into new sectors will help city government set an example to follow. Energy efficiency begins at the source; providing cleaner, more reliable and affordable energy will make transitions more simple. Most importantly, supporting cost-effective repowering or replacement of inefficient and costly power plants, developing clean distributed generation and fostering the market. Finally, modernization of transmission and distribution systems through increased natural gas support and reliability, encouragement away from harmful fuels to ensure reliability of power delivery and development of a smarter, cleaner utility grid.

The City of New York, PlaNYC, 105.
Climate Change

There are six primary objectives to positively affect climate change for New York City. First is to reduce and track greenhouse gas emissions by becoming accountable for the release of an annual inventory of greenhouse gases and to assess opportunities to reduce emissions by eighty percent by 2050. Second, assess the risks from climate change as well as where the city is currently vulnerable through accession of climate change projections, partnering with Federal Emergency Management Agency (FEMA) to make flood maps current, and develop new tools in measuring and predicting the future of climate exposure. Next is to increase the resilience of buildings and natural environment throughout the city by updating regulations and encouraging usage of flood protection in buildings and installing such protections on both critical infrastructure and costal regions. Protecting the public's health from negative affects of climate change, can be achieved through mitigation of the heat island effect by the installation of green roofs and white coverings and continuing research to understand what the long term impacts of climate change are on public health. Fifth, become more prepared for extreme climate events by integrating climate projections with emergency management and planning. Finally, facilitating resilient communities through access to information and outreach.\(^8\)

\(^8\) The City of New York, PlaNYC, 151.
Economic stimulation will be important for all of the above factors to progress and the city has taken steps to ensure that this will happen. On December 19th, 2011, New York City Mayor Michael R. Bloomberg announced in a press conference that a partnership of Cornell University and Technion Israel Institute of Technology had won a competition that the city held to develop a large area on Roosevelt Island, located in the East River, in between Manhattan and Queens. The press release from the mayor’s office explains that the large-scale applied science campus is planned to have an initial phase of the permanent campus completed by 2017, expanding to over 1.3 million square feet by 2027. Bloomberg also announced that, in return for developing the eleven-acre site, the City of New York would contribute $100 million for infrastructural improvements. Additionally, Cornell has revealed that an anonymous donor has contributed a gift of $350 million towards the endeavor. Mayor Bloomberg expressed that the development is “…Designed to dramatically transform the city’s economy and create tens of thousands of jobs.”

The campus will increase the number of full-time graduate engineering students enrolled in the Master’s and Ph.D students by approximately 70 percent. Final results will be reached by 2043 when 2 million square feet of housing for as many as 2,500 students and 280 faculty members will be completed.

Finally, Cornell revealed that they have a $150 million venture fund to support small and emerging businesses coming out of their programs.\(^\text{10}\)

In one strike, Mayor Bloomberg, Cornell University, and Technion have altered the trajectory of New York City’s service oriented economy toward research and development in the field of science and engineering. This commitment shows foresight in the importance of a shifting economy, moving toward the creation of knowledge as product after years of watching manufacturing disappearing overseas. A recent economic analysis conducted by the City of New York has projected that the campus will generate $7.5 billion in net present value and more than $23 billion over the next thirty years, not to mention the $1.4 billion in tax revenue the city will collect. In the short term, the campus will create up to 20,000 construction jobs and up to 8,000 permanent jobs.\(^\text{11}\) The New York Metropolitan area is already home to 50,000 Cornell graduates\(^\text{12}\) and, with the new campus, that number will only increase. These graduates will join and start businesses – 600 spin-off companies and up to 30,000 jobs,\(^\text{13}\) the analysis claims – that will need an infrastructure to support their needs in the future; SoHo could position itself to become a hub for production in the art of science.

Further proposals that would support SoHo’s development into the future and directly affect the neighborhood come from a study called 5 Principles For Greenwich South, commissioned by the Alliance for Downtown New York, coordinated in a joint effort between Architecture Research Office, Beyer Blinder Belle, Open, and Marc Kristal, lays out suggestions and projects that, in the future, could unite the west side of Manhattan from Battery Park all the way to Chelsea. Five strategies were developed based on extensive research: “1/ encourage an intense mix of uses; 2/ reconnect Greenwich Street; 3/ connect east and west; 4/ build for density, build for people; create a reason to come and a reason to stay.”\(^\text{14}\) Additionally, the projects proposed reach as far up through Hudson Square (directly west of SoHo) to Chelsea and the Highline and represent a visionary future for the lower west side of Manhattan.


\(^{11}\) Office of the Mayor of New York City, *News From the Blue Room*.

\(^{12}\) Perez-Pena, Alliance, 2.

\(^{13}\) Office of the Mayor of New York City, *News From the Blue Room*.

Densifying SoHo

Three of these principles, though tailored for Greenwich South, can apply to SoHo; as discussed in the history of the neighborhood, the current predominant usage is retail, with a few restaurants, a gallery here and there, and upscale loft apartments priced far above the median for rental in Manhattan. Diversification of use would benefit SoHo in the long term and suggestion one becomes important. Broadway and West Broadway already act as strong connective arteries to north and south of SoHo, eliminating the need for an equivalent to number two. With the development proposed in 5 Principles For Greenwich South, SoHo is positioned to be an east-west connection from Hudson Square through Little Italy to the developing Bowery. Broome Street is a strong connection but is a primary motor traffic corridor and restricts pedestrian and alternative transportation through SoHo. Finally, as expressed by The City of New York’s PlaNYC 2030 study, density will be a key for the future of all of Manhattan due to projections in population increases over the next twenty years. However, part of the charm of SoHo is its scale. Strategies to retain the humanism in the neighborhood will be necessary while increasing capacity for people.

In Five Principles For Greenwich South, the producers continue the process by collaborating with various New York architecture firms in creating suggestions for buildings and infrastructure that support the principles. The first affecting proposition for SoHo is the planned reconnection of Greenwich Street at the new World Trade Center that will effectively create a corridor through several key areas of the west side, linking the southern tip of downtown up to Gansevoort Street. This would connect Battery Park, through
the Financial District and Greenwich South, through Battery Park City, TriBeCa, Hudson Square the West Village, to the Meatpacking District and the beginning of the Highline that continues further north into Chelsea to Hell’s Kitchen. Development has already begun in some of these areas; Donald Trump has placed Trump SoHo Hotel\(^{15}\) in Hudson Square and many industrial buildings along the edge of the Hudson River have been renovated and repurposed. New York University has proposed redevelopment of a portion of its campus directly to the north.\(^ {16}\) If SoHo is to continue as a hub in Manhattan, adjustments should be made in order to keep up with future development surrounding the area.


PlaNYC does an excellent job of laying out problem areas for the development of New York City as a whole but does not address Manhattan itself. This is a problem because, as population grows, housing will only exist for those that can afford it making live/work situations difficult. The city is, however doing well in promoting Manhattan as a hub for technology of the future, a Silicon Valley of the East Coast. With the addition of Cornell’s campus on Roosevelt Island, development of the New York University campus and other economic and job stimulating efforts are well on their way. SoHo could easily establish itself as a central access point to the entire city with subway stops surrounding the neighborhood and existing above ground access from from east to west on Broome Street and north to south on Broadway. The densification of the neighborhood and the facilitation of new programs would help make SoHo the economic hub in New York City’s future.
Currently, the United States National Parks Service, a division of the Department of the Interior, sponsors a program called the National Register for Historic Places, which was established, as “Authorized by the National Historic Preservation Act of 1966… is part of a national program to coordinate and support public and private efforts to identify, evaluate, and protect America’s historic and archeological resources.” Further, Mitchell Schwarzer, in his 1994 article “Myths of Permanence and Transience in the Discourse on Historic Preservation in the United States” published in the Journal of Architectural Education, claims that preservation “…Emerged in the United States during the nineteenth century as an attempt to establish national identity through cultural affiliation to past events, sites, and buildings.” According to the National Register of Historic Places, there are four major requirements for the consideration of a property:

“A…[A]re associated with events that have made a significant contribution to the broad patterns of our history; or B. That are associated with the lives of significant persons in or past; or C. That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or D. That have yielded or may be likely to yield, information important in history or prehistory.”

Clearly, the regulations have been purposefully broad in its criteria, primarily to incorporate as many properties as possible. The
preservation of buildings, specifically, has been broken up into four categories as well: preservation, rehabilitation, restoration, and reconstruction. These four categories can then be applied to “...Districts, sites, buildings, structures, and objects significant in American history, architecture, archaeology, engineering, and culture.” Typically, buildings, structures, and objects have specific relevance within history that qualify them as cultural landmarks, such as relating to events, people, or craftsmanship. Districts, however, are often left out of this specificity. While they are landmarked because of some quality that represents a time period or as examples of a specific type of construction, among other reasons, it is often unclear which strategy to apply.


FIGURE 04.04: Following Page: Diagrams depicting the four primary methods currently covered in the National Register of Historic Places guidelines for building qualification.

Trends in Preservation

Preservation: OLD

Rehabilitation: NOELWD

Restoration: NEW OLD

Reconstruction: NEW

rarely exists within studied context
In the article “Four Decades of Local Historic District Designation: A Case Study of Newport Rhode Island,” Shantia Anderheggen, former preservation planner for the city of Newport Rhode Island discusses some of the shortcomings in the policies of historic preservation. Beginning in 1959, predating the National Register for Historic Places by seven years, the state of Rhode Island passed legislation to allow local governments to protect regions from human intervention without proper permission. Newport began designating these areas, called historic districts, in 1965 as a response to “urban renewal and ‘revitalization’” that was threatening the stock of historic buildings, including some of the earliest examples of social and religious structures in the United States that dated as far back as 1699. While she agrees that there is a need for historic preservation, Anderheggen believes that there are two major problems associated with the policy of historic districting. The first is the lack of clarity of legislature that protects historic buildings and districts. The author says that one common argument against local historic district laws “…is the claim of vagueness – that is, that the local ordinance is unclear or ambiguous, making it difficult both for property owners to understand the law and for staff or commissioners to uniformly administer and enforce the law.” This vagueness implies that the case-by-case nature of the rulings on historic districting can create uneven results, even when regarding similar situations, which is, in part, due to the National Register for Historic

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6 Anderheggen, “Four Decades of Local Historic District Designation: 24
Preservation’s language:

The National Register refers to as the “integrity” of historic resources—
their physical characteristics such as location, design, setting, materials,
workmanship, feeling, and association; that is, simply, how and where the
resource appears and not a resource’s many associative characteristics—
the historic events, people, economic trends or circumstances, for
example, that comprise its historic context or “significance.”

By focusing on the aesthetics of resources, rather than on their
associative values, Newport’s politically appointed, volunteer
historic district commission has perpetuated the belief that appear-
ance trumps history when it comes to what should be preserved. As
a result, commission decisions tend to reflect individual aesthetic
tastes and architectural preferences rather than what aspects of
Newport’s history, including those that may be properly associative,
are valuable, and thus merit protection.7

The second issue has to do with restrictions on privately
owned property; a Supreme Court case is cited (Penn Central
Transportation Company, et al. v. New York City), which decided
that “Aesthetic values, including historic preservation, are important
public interests that justify restrictions on private land…[with] this
new legal precedent, historic district designation subsequently saw
a marked increase across the country.”8 The legislation and the
implementation of these new preservation approaches may have
actually saved the city of Newport by providing a primary source of
livelihood for residents after the United States Navy began greatly
reducing its presence, threatening the population and incomes. As
a result, however, Newport began to move towards preservation
as an attractive way to leverage the burgeoning multi-million dollar

7 Anderheggen, “Four Decades of Local Historic District Designation,” 30
8 Anderheggen, “Four Decades of Local Historic District Designation,” 22
heritage tourism industry in the United States, commodifying the city. As laws were enacted to protect the buildings and districts, increasing numbers of visitors began to go to Newport. To support preservation and tourism, strict constraints were enforced on buildings, creating construction bottlenecks and many citizens felt their right to complete work on their homes and businesses was being violated. This perceived violation of property rights spawned complaints, many regarding issues such as replacement of windows, property perimeter walls, and in-kind roofing, which had to be filtered through extensive proceedings and approval processes in order for work to be started. In response, the city organized a task force of nine residents to streamline the application process for routine construction; however, the city council did not enact the suggestions that the task force provided.

After fifty years of safeguarding historic structures, issues still plague preservation in Newport today. Residents have begun questioning preservation’s ability to propel Newport into a viable future. The author provides several examples of why traditional historic preservation limits the prospects of Newport including: facilitating a stereotypically parochial island way of life, causing economic tensions, reliance on a tourism economy, the unfortunate inclusion of non-historic structures within districts, and the tendency to focus on aesthetics rather than historical or cultural significance. While all of the observations made by Anderheggen complicate historic preservation, the final is of the most consequence because it is central to modern questions of preservation; the others function in a relation to it. To explain: when people are used to a certain way of life, they have a desire to keep the comfort of that way of life and preservation laws enabled the collective to keep an idealized image of ‘the good old days’. The fact that the image is idealized exposes the fallacy that the building is in a perfect state or better than reality, which it logically cannot be. This is also tied to heritage tourism
in that, in order to make visitors feel that they are experiencing an authentic colonial city, residents must keep up the appearance of the idealized, static state. In turn, economic tensions are exacerbated because, while the image must be kept up, not all of the residents are able to live the life that is portrayed to tourists. In fact, according to the article, approximately fifteen percent of Newport’s population lives below the poverty level, which is five percent higher than Rhode Island’s state average. Most of these people live in vernacular houses that are often ignored by preservation and “…Perhaps this focus [‘on Newport’s Gilded Age history—on Bellevue and Ocean Avenue’s estates’] has obscured the fact that less affluent neighborhoods and houses are valuable historic resources in their own right.”

To further confuse the issue, some buildings without any significance at all are included in historic districts in order to protect scenic drives or visually pleasing natural areas, which “…Likely contributes to undermining the credibility of the entire historic preservation process within the city and jeopardizes those authentic resources that the law was intended to protect.” When viewed as a whole, these factors point toward the major issue that aesthetics seem to reign supreme in much of current preservation practice and raises the question that Anderheggen poses: “…How can we better connect the physical remnants with the significance embodied in them, and then, how do we ensure that that understanding and connection remain intact?” If we are able to move away from this commodification of our built history, maybe it will be possible to celebrate all parts of the markers of our past as important developments toward the future of our culture.
Theodore J. Karamanski, Professor of History and Director of the Public History Program at Loyola University Chicago and former president of the National Council on Public History discusses the designation of historic districts in Chicago, Illinois in his article “History, Memory and Historic Districts in Chicago,” from The Public Historian, and provides commentary on the dichotomy Anderhaggen hints at. First, Karamanski summarizes the intention of designating historic locations “Expressed in the foundational 1966 study, With a Heritage So Rich” to “Give a sense of orientation to our society, using structures and objects of the past to establish values of time and place.”

Similar concerns as what Anderhaggen discovered in Rhode Island arise: Districts created by commercial memory do play a role in preserving historic building stock, which is environmentally sound and may in the long run play a role in giving urban residents a sense of time. In the short run, however, history that is constructed without reference to the personal memory of the people who reside in the community lives only in the files of the State Office of Historic Preservation. Vernacular memory is constructed out of a shared sense of the past that grows out of a shared experience of the present. When preservation is able to tap into this common consensual memory of a community, it is unlikely that critics will look at the resulting historic district and ask, “where is the history?”

Karamanski begins by explaining how historic districting allowed the democratization of the National Register with the goal being to ensure “…That the breadth and diversity of the American experience was reflected in what is preserved,” but was quickly overtaken by the “‘Literary turn’… the past has always been a story

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14 Karamanski, “History, Memory and Historic Districts,” 41.
constructed by purposeful tellers,” which “[Downgraded the historian's job] from the naïve task of determining what was true in the past to constructing narratives about the past.” These differing views of preservation are to be explored through two case studies. The first is of two districts protected in the Uptown neighborhood, now called Buena Park and Sheridan Park after train stops that existed there for a short time. The second is the preservation of areas where Chicago’s modest bungalow homes are prominent.

The history of the Uptown neighborhood is one of ups and downs and, unfortunately, before designation, the collective memory of the area was associated with one of the downs. Booming in the 1920’s, the slow decline began after World War II when the population shifted from the likes of Charlie Chaplin to manufacturing workers that were lured by Uptown’s proximity to downtown Chicago. When those jobs began disappearing in the early 1980’s, the people did too and Uptown became a slum; quickly, arson-for-profit ran rampant. It was also during this time that a few pioneering developers were attracted to Uptown because of its vintage housing stock and proximity to Lake Michigan and they realized that historic districting, with the monetary incentives it implied, would be an excellent option to make the neighborhood profitable. Uptown, however, was comprised predominantly of typical vernacular housing that was more difficult to get designated but a young historian named Daniel Bluestone had a solution. By claiming that the building stock of non-descript brick apartment buildings represented a turning point in urban residential pattern, Bluestone was able to get a section of Uptown designated and renamed as Buena Park. Following this precedence, Sheridan Park, another section of Uptown, underwent a similar process and the two were used not just to preserve the buildings but also to completely reinvent the neighborhood. Results were quick: “Within two years of designation, the medium price of a condominium unit increased from $49,000 to $67,000.” The jump in property value priced homes out of range for the lower-mid and low-income residents that had provided richness and diversity to the

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15 Karamanski, “History, Memory and Historic Districts,” 35.

16 Karamanski, “History, Memory and Historic Districts,” 37.
neighborhood and, therefore, solidified the reinvention of neighborhoods into a strategy for gentrification.

Conversely, Karamanski brings the modest bungalow as an example of preservation with stability in mind rather than dividends. Chicago Mayor Richard M. Daley brought attention to the small, one-and-a-half story brick homes that flourished between 1915 and 1930, with the aim to preserve more than 100,000 structures that make up approximately one-third of the city's housing stock. The prevalent bungalows have considerable recognition in public memory; many famous Chicagoans have called them home at one time or another and, as they reached eighty and one hundred years old, they either had to be revitalized or replaced. The decision was made and six districts were designated with a few differences from Buena Park and Sheridan Park. First, the renovations within the historic district provided tax breaks for homeowners and the status was not used as a tool of gentrification, ultimately displacing many residents, but instead several preservation programs were initiated to help keep current residents in their homes. Equally important to the economic motivations of preservation were the historic motivations. As research was conducted for Buena and Sheridan, the history was stitched together in order to make a convincing argument as to why the district should be designated. The buildings filled up with many residents who were young, single, and not inclined to put down real roots in the neighborhood. With the transformation complete, the commercialized history was no longer necessary and was easily released with no further function past attracting those that wanted to take advantage of the tax credits and popularity and status of the neighborhoods. The bungalows, however, were typically owner occupied and often had children that attended local schools. This naturally created vested interest in the past and future of the neighborhoods. Several programs were initiated in order to maintain the public memory of the bungalows, including a city-sponsored group of historians that produced an illustrated volume chronicling the buildings, as well as grassroots efforts that provide “Workshops on woodwork restoration or flowerbox gardening, tours of other bungalow communities, visits to nearby historic sites, and the classic expression of community solidarity, and pot-luck suppers.” These types of initiatives expose the pride that people have in their community allowing regular people to take responsibility for regular buildings that they have come care about because of true sense of ownership instilled by neighborhood pride.

17 Karamanski, “History, Memory and Historic Districts,” 38.

18 Karamanski, “History, Memory and Historic Districts,” 40.
Converse to preservation of any type, urban renewal, as an urban fabric and revitalization strategy, has been utilized throughout modern history as a way thought to bring new life to an area. In many American cities, this began in the 1940s and had governmental support in order to broaden the national highway system and connect major nodes and connect suburban sprawl with downtown business districts. When the highways came in, however, they were typically placed strategically to cut through slums and tenement housing areas and forced those of lower income to new regions. Robert Moses, one of the most controversial planners in the history of the United States, was an early proponent of urban renewal and, due to his foresight and skill at policy creation, took advantage of tax dollars that were generated by the New Deal to bring work back to New York. Moses became polarizing because of the access and areas he chose to place public projects, as they often destroyed or excluded low-income neighborhoods, as expressed by Andras Tokaji in his article in the Journal of American Studies:

He did not care for either the dwellings or the communities of the residential quarters marked out for destruction. Moses demolished the homes of a quarter of a million people for highways, and probably evicted almost as many again to make way for the Lincoln Center, the U.N. building, Fordham and Long Island Universities, and other mammoth developments. Many of the expelled were impoverished blacks or Puerto Ricans.19

Similar areas were also affected by large-scale housing

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projects that were, theoretically, aimed at relocating the displaced into denser communities, creating unified groupings of similar buildings. While these projects were partially aimed at updating unsatisfactory or outdated living accommodations, if the proliferated as was planned, most historic fabric would have been removed and replaced it with the homogeneous planned towers, removing the character of cities as we know them.

These development projects have either no regard for preservation or choose to only preserve the interests of certain groups, which, as shown in the case of Newport, Rhode Island, creates many problems, including distrust in the practice of preservation. In any case, the goal to sustain a built record of the cultural fabric for the United States is destroyed or left incomplete.
More recently, however, Rem Koolhaas has suggested to, in order to maintain an unbiased method of preservation and portions of historic fabric, “Impose… a kind of bar code and declare that the bands in the bar code could either be preserved forever or systematically scraped,” in a way, combining the ideas of preservation and renewal and allowing history to exist simultaneously with progress; in such a case, “You would have the certainty that you preserved everything in a very democratic, dispassionate way – highways, monuments, bad things, good things, ugly things, mediocre things – and therefore really maintain an authentic condition.”

This ideal, while noble in theory, has a few fatal flaws; buildings, or even entire neighborhoods, that people are comfortable in and are accustomed to would be removed. Additionally, if large swaths of land are to be demolished, the people displaced would have nowhere to go during demolition and reconstruction. Funding would also be an issue; such operations would have significant cost implications. Finally, the preserved sections would remain the same while the portions that are updated continue to progress leaving no trace of the associations between the two and, therefore, leaving the first meaningless and removing the significance it is supposed to preserve. For these reasons, Koolhaas’ suggested method is no better than the selective version of renewal. This does not, however, mean that the methodology is completely useless in the context of this thesis and, in fact, could inform a middle ground between preservation and renewal if viewed as a strategy on a building-to-building basis.

Koolhaas, Rem, “Preservation is Overtaking Us,” Future anterior: journal of historic preservation history, theory, & criticism 01, no. 02 (Fall 2004): 01-04.
The National Parks Service National Register of Historic Places was created in an effort to protect as many American things as possible and has been successful in saving many historic land features, districts, sites, buildings, landmarks, etcetera. The criteria in selecting which to designate is broad for the purpose of inclusion but can be used to distort the integrity it was intended to preserve, as was seen in Newport, Rhode Island and Buena Park and Sheridan park districts in the Uptown neighborhood. Partially in response to this and in the name of progress, controversial visionaries of the mid-twentieth century, one of the most famous being New York City’s Robert Moses, declared the old to be dirty and useless and demolished historic buildings and hundreds or thousands of homes to make way for new buildings and infrastructure. Building from the 1960’s and 1970’s and the momentum from standing up to Moses, failing to save historic buildings including Pennsylvania Station but having great success in preventing Greenwich Village and SoHo from being subsumed by mid-income housing and infrastructure. These areas were saved by creating historic districts that similar to the National Register for Historic Places, broadly protect entire blocks or neighborhoods of buildings, whether all of them are historically significant or not.

Districts are often too large or are representative of a certain type or time in architecture so pure preservation becomes too costly or doesn’t have enough evidence of significance in individual buildings. If there is funding, however, preserved districts are often chosen on a bias rather than pure historical merit. Rehabilitation, which has been a popular and successful method applied to historic
districts across the United States, often becomes a misrepresented shadow of the original whereas restoration shows a mixture of the two, preforming plastic surgery to create an educated guess on what was originally there, opening the door to bias as well as misrepresentation through absence (purposefully or not) of particular portions of the project. Finally, if restoration is plastic surgery, reconstruction is the Frankenstein Monster. Starting from scratch and stitching together found information is the most dangerous, raising questions about the integrity of the full representation of spatial identity.

The focus of this investigation is exploring existing structures in a historic district, SoHo, that is designated as such due to citations from all four of the National Register of Historic Places primary requirements for consideration of landmarking. Thus far, preservation and rehabilitation have been the most-applied strategies with some amount of restoration. Reconstruction has not been attempted in the cast iron district and, as mentioned, is the most difficult of the strategies to accurately display true historic significance. Renewal, on the other hand, disregards historic significance altogether and looks to start with a tabula rasa. It has been suggested that it is possible to combine preservation and renewal to preserve the past as well as continue progress into the future but this ideology has its downfalls as well. If portions of a city are to be redeveloped systematically and others left exactly as they are, the portions left as a record become further and further detached from the historical context that they are supposed to represent. The question to be asked is whether or not a strategy that takes all of the others into consideration is possible.

Choosing a single strategy does not seem appropriate and could affect the integrity of the cast iron structures that should be represented as a pivotal stock of built history. By combining several strategies together, it may be possible to find a solution to the dilution of current strategies used in the Cast Iron District in the past. The history of SoHo has already been discussed but there is a relevant aspect of the buildings themselves that could lead to a better understanding of their significance as well as their future within a progressing New York City.
The methods that have been applied to SoHo have resulted in a product with more in common to Buena Park and Sheridan Park than with the bungalow communities of Chicago and, in a way, it is at a disadvantage due to the completeness of the commercialization that has occurred over the past twenty to thirty years. The history exists, however, and it is certainly worth exposing: the methodology used to build many of the structures in SoHo represents an important transition in building technology and practice. Cast iron in its height as an architectural material was once more trusted than steel and allowed many architectural possibilities that masonry construction could not. Casting iron was also a repetitive process of casting and its ability to quickly assemble parts (rather than assembling individual materials) on site with bolt attachments was attractive to business owners that wanted to open their doors as quickly as possible in the economic prosperity of the time. The modularity also allowed parts to be pre-fabricated in the controlled environment of the manufacturing facilities and was not affected by changes in weather and marked one of the first industrialized technologies utilized in architecture and construction. Better strength to mass ratio, compared to masonry construction, allowed larger openings in the facades, higher ceilings, and larger bays for better light emission and brighter storefronts easier working conditions, and open, adaptable plans. Cast Iron was truly pivotal in how large buildings were designed and constructed; the mass production, modularity and strength of the system pushed architects to think into the future of architecture.

Burns, New York: An Illustrated History, 530.
Historically, iron as a ubiquitous and useful material has been in use by Homo sapiens for thousands of years, warranting an entire era being named for its use. Earliest indications of the use of iron place it around 2000-1500 B.C. by the Assyrians who, by 722 B.C., were creating tools with it. Technology in production progressed until, in 1408, Weardale Iron Works in England was able to produce almost 2 tons of iron per week. This process and working the iron was long and difficult to control; the method that was developed in the 13th and 14th centuries called for a paste from a mixture of crushed iron ore, marl, and lime (as a binder), which was placed on a forge with burning charcoal and heated. This produced a paste that could be hammered into wrought iron and used in the creation of tools and other useful objects. Due to the unwieldy nature of the wood-fueled fire to heat the forges, the iron paste would often dissolve the carbon it contained, lowering the melting point. The paste would become a liquid and run out of the forge and was, at first, discarded as ruined product. By accident, iron that could be cast in a mold was discovered. This new form of iron, or pig iron, gained popularity in the 1500’s through the 1700’s and was primarily used to cast marking plates and fireplace liners as chimneys began to be placed in-wall, protecting the wall construction. Between 1650 and 1750, cast iron was put to more architectural uses in ornately decorated fences and railings. Development of roads, bridges, canals and affiliated infrastructure drastically reduced transportation costs and cast iron was suddenly much more

accessible economically. Various types of engineers and architects began to use it in applications including fireplace surrounds, machinery and engines, domestic stoves and grates, and piping and sewage management. The first iron bridge was constructed in 1755, still in England, proving the structural usefulness, which naturally piloted the way for wider architectural use in the form of railings, balconies, and fences in the mid-to-late 18th century. The Industrial Revolution brought efficiencies and control over production that further popularized cast iron and international markets opened; the material was finally brought to the United States and would be used in similar fashion as in Britain up to that point. In 1820-1830, the British continued to push the uses of cast iron and began producing iron rails for the transportation of goods and people, proving the repetitive production abilities in large quantities; projects became larger and more complex. Capacity for soaring heights was capitalized on and cast iron was used in conjunction with advances in glass technology to build greenhouses. Structural research in 1827 developed the “I” shaped beam, where the top flange was smaller than the bottom (as opposed to the upside-down “T” shape that had been used previously). This breakthrough allowed the increase of structural capabilities and the increase of bay sizing from approximately fourteen feet, using traditional masonry technology, up to twenty-six feet; clearly a significant development. Meanwhile, having made several trips to England, inventor James Bogardus recognized the potentials of cast iron and brought the technology to America in the 1840’s, constructing three buildings in New York City. He quickly patented the all-iron building, where all parts were made of cast iron, including structure and exterior walls. Additional attention was brought to cast iron when Sir Joseph Paxton employed the new beam shapes to create the greenhouse behemoth, Crystal Palace for the 1851 Great Exposition. This not only marked the emergence of cast iron technology as a viable, widespread building material but also as a pre-fabricated, standard unit, fast-to-assemble phenomenon. By the early 1850’s, the “Cast Iron Age” had arrived in America; a duplicate of Britain’s Crystal Palace was constructed in the United States for the 1853 Exhibition of All Nations on the site of what is now Bryant Park in New York City and, in 1855, the wooden dome of the capitol building in Washington D.C. was replaced with cast iron ribs. New York City utilized cast iron in its industrial shift from Pearl Street at the tip of Manhattan, after fires wiped out much of the area, to quickly construct hundreds of

FIGURE 05.04: Exterior view of the Crystal Palace.

Gloag, A History of Cast Iron In Architecture, 82.
The cast iron boom ended completely by the 1920’s, cast iron had seen its last usage in new construction. By the 1920’s, cast iron had seen its last usage in new construction. By 1902, steel had already proved that steel was the structural material of the future. The cast iron boom continued into the early twentieth century until the construction of the first “skyscrapers” including the Flatiron Building, completed in 1902. James Bogardus, who is considered the father of American cast iron buildings, in an age of rampant fire, also marketed his technology as fireproof, another attractive draw for owners. Typically, however, most cast iron buildings were not constructed completely out of cast iron. Traditional masonry walls running the full length of the plot dealt with the majority of gravitational loads and, even if interior columns and beams were cast iron, floors were still constructed of wood and the goods produced and stored were highly susceptible to fire. Many buildings burned and, as firefighters used cold water on the building, the rapid cooling weakened and cracked the iron. In response, cast iron fronts were mandated by code to be backed by traditional masonry or terra cotta surrounds, which compose the majority of cast iron buildings that still stand today. The cast iron boom rose as an age of rampant fire, also marketed his technology as fireproof.

30 Koolhaas, Delirious New York, 88.
Edgar Laing Stores

In 1971, in the shadow of approaching urban renewal, the building on the (former) northwest corner of Washington and Murray Streets was scheduled for demolition along with much of the surrounding neighborhood. The Edgar Laing building was identified as New York City’s earliest example of cast iron building still standing, most likely the third ever built, and it was proposed that the structure be spared from the impending construction.\(^{21}\) The decision to deconstruct the façade, fully document with measured drawings and photographs and carefully number and catalogue individual pieces to ensure proper re-placement of all parts as originally erected. In order for this to happen, the National Parks Service’s Office of Archeological and Historic Preservation allocated $450,000 for the disassembly, documentation, storage and eventual reconstruction of the façade on the new Manhattan College campus as a landmark; only $80,000 of this was used to pay The Anchor Demolition Corporation and Industrial Wrecking Company, Inc., of Brooklyn for their services. Renowned architectural historian James Marston Fitch of Columbia University gathered a team of students to complete the documentation as the building was dismantled.\(^{22}\)

Original construction began on February twenty-fifth, 1849 and was completed only eight weeks later. It is believed that the building was a second version of James Bogardus’ own factory; both were “...constructed with four story iron facades, consisting of piers

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with engaged columns, spandrel beams, and double paneled wall sections,” though the factory included cast iron structural columns throughout rather than only at the façade. One-hundred-fifty tons of iron had to be supplied by four separate foundries: West Point Foundry of Cold Springs, New York; Burden’s Iron Works of Troy, New York; Novelty Works of Stillman, Allen & Co., and the foundry of William L. Miller, both of New York City. Everything within the bounds of the cast iron was standard warehouse construction of brick bearing walls and heavy wooden floor framing. Each floor of the Laing Building was separated into five large spaces and each had a large store/workroom near the stairway. Originally, the iron was painted with a tan-colored paint that was mixed with sand in an attempt to mimic stone.

Prior to demolition, the building had fallen into severe disrepair. The ornamentation over the spandril panels had been removed leaving an austere appearance over the entire building. Aluminum-frame awnings had been added, hiding much of the lower portion

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*Figure 05.08:* Following Page: Exploded diagram depicting floor plans and cast iron elevations.

*Figure 05.09:* Interior view of the cast iron structure as the building was being dismantled.
of the building and all of the original doors and windows had been replaced at one time or another. On the interior, various alterations had occurred including added partition walls, plumbing, lighting (as technology progressed), and enclosure of the stairway.

Deconstruction and documentation lasted five-weeks-and-two-days. During this time, it was found that the cast iron parts had rusted significantly but affected the façades cosmetically and made the connection bolts slightly more difficult to remove. As parts were unbolted, they were cleaned, painted to prevent re-rusting, and numbered to aid in reconstruction. After being categorized, the parts were brought to an empty lot several blocks from the original site where it was to be stored until its reconstruction. Unfortunately, a chain link fence was the only barrier between the street and the cast iron, which was stolen shortly after and the building did not finish its intended cycle.
Though seemingly un-alike, Metabolism and Historic Preservation meet through the Cast Iron District. The Edgar Laing Stores proves James Bogardus’ original marketing tactic, saying that cast iron could be deconstructed and reconstructed as many times as necessary. If the façades of the Laing Stores were not stolen and reconstructed, would it still be the historic building that existed on the corner of Washington Street and Murray Street? There is no denying the historicism of the cast iron itself but it seems that reconstructing only the façade on the Manhattan College Campus does the building a disservice by breaking it from its historic location and converting it into an object only; a museum piece without any context of what actually composed the cast iron structure. So, in this case, if the cast iron were reassembled in conjunction with new construction designed specifically to expose the historic nature of the old, wouldn’t that give a more accurate reading? The position taken here is that it would.

Given the modularity of the cast iron, the parts could be shuffled to some degree without affecting the nature of the construction and connected to a new structure. In this way, the adaptation of the old parts with the new could be read as a type of Metabolism, which, in turn, a new Metabolic building would lend itself to change and adjustment in another century or so.
As discussed, one of the primary issues that arises with historic Preservation is the fact that, even though preserved, the building can never accurately represent what was originally there because it has, effectively, been removed from the food chain of development. There is a possible solution to this, however, and it lies in the Japanese Metabolist theoretical movement that began in the 1960's. For some, Metabolism and Preservation seem like exact opposites, and in many ways they are, but this is where the most interesting solutions occur. For example, the Metabolists occupy an area with Futurism while Preservation concentrates on the past. Blending the two could produce a product that is of the past but looks forward into the future, both protecting the historic structure through maintained relevance and by creating a physical record, or timeline, of developments in our built environment, which would provide the most accurate historic representation possible.
“We do not regard ourselves as Utopians… Regardless of whether the city limits its expansion or not, the mobility of people, goods and information is increasing at a drastic pace and the pattern of a living structure is becoming volatile. With closed communities crumbling, the neighborhood system, which has been a basis of city planning, is now becoming meaningless… Our plans served to explain how cities should exist…”

One of the most interesting large-scale interpretations of pre-fabrication in architecture was the Japanese movement called “Metabolism.” The Metabolist movement began in the 1960’s when Japan began an economic boom, equaling or overtaking production and export of goods from the United States and Europe. Such times of prosperity usually are correlated with increases in population; the island nation was running out of space and postulations on where the people would live and work readily welcomed. External occurrences further such as major Japanese earthquakes, specifically the one

2 Ross, Michael Franklin, Beyond Metabolism (New York: Architectural Record, 1978), 7.
in 1923, and the events at Hiroshima and Nagasaki, that continually destroyed large portions of cities, which required rebuilding, allowed experimentation, and exposed the necessity of strategic building and engineering practices. Those that aligned themselves with metabolism believed that their job as architects was to create a dynamic environment that could “Live and grow by discarding it’s outdated parts and regenerating newer, more viable elements.”

As technology continually progressed around them, the Metabolists watched as their island nation ran out of space and the fruits of technological advancement came faster than building technology could evolve. The idea was to create interchangeable parts that could be removed in times of recession, added to in times of prosperity, and replaced as new technology emerged. As Charles Jenks points out in the introduction of the book *Metabolism In Architecture*, by Kisho Kurokawa (considered one of the fathers of Metabolism and more famous of its proponents), Japan has a culture of continuous change and renewal, citing the Shinto Shrines of Ise that have been rebuilt many times over centuries. Michael Franklin Ross in his book *Beyond Metabolism*, continues to explain the evolution of Metabolism through Japan’s longevity in the modern dynasty, which has lasted over 2,600 years, due in part to their ability to recognize the best components of dominant societies and, in turn, absorb those portions of culture they deem beneficial into their own lives. This ad hoc method of advancement of Japanese culture mirrors the biological ideals of the Metabolist movement and helped the widespread acceptance of the designs that they created. Finally,

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3 Ross, Beyond Metabolism, 7.
4 Kurokawa, Metabolism in Architecture, 9.
5 Ross, Beyond Metabolism, 8.
Ross quotes Robert Venturi’s principle of “Both/And” architecture that includes “Elements that are both good and awkward, big and little, closed and open, continuous and articulated, round and square, structural and spatial,” to explain the dichotomies that occur in Japanese culture and allow them to celebrate the combination of old and new existing simultaneously.

Early metabolism manifested itself in megaform structures and infrastructure based on a central, permanent, core with replaceable plug-in components. These sweeping structures dominated landscape and created a large-scale solution for something that could be a small-scale problem. Many different architects were involved in the early stages of Metabolism, including Kurokawa, and all brought something different to the conversation. Typically, however, most designs had at least one commonality: permanent structures with replaceable units for habitation. For Kurokawa, prefabricated megastuctures with replaceable program were the future of architecture in Japan.
Prefabrication

The idea of prefabrication and interchangeable parts, in the 1960’s, however was not completely new; Le Corbusier had been looking at the way that ships were built and his 1947-1952 project Unite d’Habitation high-rise building in Marseilles was conceived with replaceable and movable units but was not built as such in its final form. Architects Warren Chalk, Peter Cook and other members of the English group called Archigram, began using

“The technologies of the 'Space Race,' the dawn of the digital information revolution, and the US-led consumer boom, to develop new visions of what life and society might be like in the immediate future. The projects included the famous Walking City, Plug-in City and Instant City, which variously proposed the use of pods, capsules, megastructures, inflatable or temporary components, cars, furniture, clothes and gadgets to replace conventional building forms – in other words, the inventive use of new technologies to rethink society and its forms of habitation.”

These projects, showing considerable foresight and creativity, became very popular among the architectural community; unfortunately they did not catch on elsewhere and remained theoretical.

Japanese architect Kisho Kurokawa created the first capsule projects to be seen built, including the Sapporo Labor Welfare Center, the Nakagin Capsule Building, and the Osaka Sony Tower. The first were based on a central service core with habitable spaces located in the capsules. Kurokawa shifted this with the Sony Tower office building by placing the mechanical services at the exterior in replaceable capsules, recognizing that these changed faster, allowing them to keep up with technology. Later, the Centre Georges...
Pompidou, designed by architects Renzo Piano, Richard Rogers and Gianfranco Franchini, is a similar built project that celebrates the purely functional aspects of a building. These examples represent a closed system where a permanent framework is initiated and can only accept a specific replaceable part, which has produced many interesting projects but is limited in potential for future expansion.

Also during the Japanese Metabolism movement, projects utilized a second, more flexible open system that allowed building expansion, contraction, interchangeable/replaceable, and/or recycling of parts. Open systems are composed of separately prefabricated elements that serve specific functions and can be
assembled in different ways to create differing units. GUP VII, a study scenario by Uchida Laboratories (one of the largest construction companies in Japan that focuses on prefabrication, still in operation today) created an open system of building materials and parts, which consisted of a structural framework, within which cubes of prefabricated built space could be inserted. The built space would have all ductwork, electrical conduit, and piping integrated within before being placed within the framework. Both the framework and the cubes were structurally independent and, therefore, could create flexible organizations with adaptable boxes of program and had the potential of expanding infinitely vertically and horizontally. These qualities embody the primary idea of open system architecture; independent entities can be inserted or detached without disturbing the existing functions of surrounding components.

More recently, the architecture firm Kieran|Timberlake has demonstrated the modern open system, including their projects Cellophane House and Loblolly House. These buildings utilized structural aluminum sections that allowed the insertion of fully-loaded boxes of program (such as a bathroom) and “cartridges” in the floor, wall and ceiling plains that were fabricated off-site with all utility-oriented components built in. The extruded aluminum sections allowed simple bolting of the cartridges to the existing framework and the structure to itself. As discussed in their book Refabricating Architecture, this method of construction is documented as providing several benefits. First is architectural control; the advent of building...
Another benefit of the “Reduction Theory” is that parts can be assembled in a variety of ways, creating a flexible system to provide what the client desires.

Matrix laying out the recyclability and, therefore, sustainability of Kieran|Timberlake’s Celephane House.

TOTAL RECYCLABLE MASS = 82%
information modeling, or BIM, has become a tool to blur the lines between the perfect, tolerance-free computer world and the reality of imprecise, messy, unpredictable site conditions. The prefabricated approach allows components to be assembled to the greatest extent in a climate-controlled environment allowing the highest degree of control over the final product. Components arriving mostly or completely assembled allows for fast assembly on site, ecological benefits from less material waste and site disturbance and finally economic benefits due to the ability to continue fabrication through any type of weather, twenty-four hours a day and minimal on-site construction. The only downfall in the Kieran|Timberlake theory is where the prefabricated portion meets the uncontrollable environmental conditions of the site, as was the case with the structural piers at the Loblolly House.
In his book *Adaptations: New Uses For Old Buildings*, Philippe Robert explains that

“Perhaps a new way of thinking ought to be fostered, one which considers that towns are never completed and that the buildings which are erected are always complements or additions to what already exists… An unfinished fragment of a larger edifice,”

expressing a philosophy that parallels the intentions of Metabolic design but differing in the desire to reuse existing structures rather than starting from scratch as the Japanese could after the series of devastating events that occurred in their country. In this case, the built structure relates to the permanent infrastructural component that Kurokawa and his contemporaries used in order to create their megastructures. The cast iron district in SoHo poses a particular opportunity as it represents one of the first prefabricated, rapid assembly, replaceable technologies used in buildings, further relating to the ideals in the previous section. Ultimately, the goal of creating this intersection is to provide a conceptual look at how the cast iron buildings could be reused and incorporated into a higher density Manhattan neighborhood of the future.

According to Robert, reuse falls into one of three categories: “… Historic Preservation, re-interpretation, or the affirmation of contrast…” where clearly, if SoHo is to accommodate...

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increased density, the building stock would have to change or be altered, meaning that pure preservation would not be an option. It is also a historic district rather than a single building of particular significance, therefore there is less contextual defense to argue that pure preservation would be an appropriate approach. Additionally, attempting to copy should be avoided; author Fred Scott points out in *On Altering Architecture* that many artists and designers throughout history believe it is often equally, if not more, difficult to create a satisfactory copy of what originally existed than it is to treat what is left as a fragment that recollects the intent of the original.  

In *The Past is a Foreign Country*, David Lowenthal comments similarly on reconstituting accurate history, saying that it is impossible to find a true and completely accurate recollection of what was or existed: “Nothing ever made has been left untouched, nothing ever known remains immutable; yet these facts should not distress but emancipate us. It is far better to realize the past has always been altered than to pretend it has always been the same.”  

The theories both express a congruous message that, essentially, it is futile to attempt an exact reconstruction of a building, which leaves one final strategy. 

Re-interpretation and affirmation of contrast, which are not necessarily mutually exclusive and involve blending new and old or placing the new in contrast with the old, respectively. A process of collage, or palimpsest, as Robert calls it, is initiated and can be similar to placing one piece of design over another as if it is a drawing is continually edited and redrawn on consecutive sheets of tracing paper that are superimposed over each other; each new layer referencing

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all previous, combining parts that tell an entire story. The interest comes in the form of additional limitations that invariably arise from each of the previous strokes that, in Robert’s opinion, actually become opportunities that stimulate the imagination. Opportunities that “Enable architectural solutions to be developed which would never have been invented from scratch,” and are able to detach themselves from program and building regulations.

In order to understand where the opportunities of re-interpretation or contrast lie, it is necessary to first understand the building, as it is, within a specific context; in Scott’s words from *On Altering Architecture*, “The host building needs to be understood intrinsically and in terms of its setting, and to be looked at in terms of actualities and provenance.” To accomplish this, there must be a process to strip back preconceived notions of the building, as well as the image that the original architect has left behind, to find the intrinsic qualities:

> “Literalism as ever is to be treated with caution; the most convincing photographic evidence of a building’s past should perhaps be treated with the most suspicion. It is a procedure to determine the characteristics that are irreducible regarding the host building. These qualities are those that the work of alteration aims to carry over from the past into the present, while seeking clarification at all stages of the process. From this it is intended that strategies for the work of alteration can begin to be derived for both the host building and its context.”

The process is explained as the removal of the damaged or rotten elements that cannot be revived in the process of reuse, or of the previous additions that are deemed a misinterpretation of the existing “host.” The extensive study and analysis of the building, knowing everything about the structure, the context, the time it was built, is the only way to decide what can be stripped back.

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18 Robert, Adaptations, 4.
With any approach that is taken, the reconstitution of fragments is, inherently, to collage them - old and new held together by armatures that mark the loss or alteration of a building component and act as structural crutches. These armatures, Scott continues, should allow the fragment and intervention to be read as individual pieces and, at the same time, as a whole: “…Things that signal that they aren’t really there.”

A paradox that can only be achieved in the narrative between the old to the new in order to tell the ongoing history in a building’s use and reuse.

Scott, On Altering Architecture, 119.
Often, it is at the intersection of two unrelated ideas where innovation occurs. Metabolism and forms of preservation were never meant to intersect with one another, in fact, Metabolism was based on the understanding that the designer was beginning from a *tabula rasa*. The radical ideas of the Metabolists movement gained considerable momentum in the 1960’s but did not find a satisfactory foothold to maintain that momentum into the future, though it has regained some attention recently. The preservation movement, on the other hand, which became popularized at approximately the same time, has been able to sustain the momentum it gathered but has had very little, if any, innovative development in its manifestation since it made its American debut. There seems to be an opportunity in the combination of one with the other to fill in the shortcomings of each and create a historic architecture that is able to adapt to changing needs of the future.

Within preservation, an additive approach is not new (as opposed to attempting to indefinitely retain a ‘historic’ state or simply preventing the destruction of a building stock) but have typically had a ‘finished’ product that is just as susceptible to irrelevance as the original unaltered building. The strategies that have emerged, however, can be applied to an intersection of ideology. When broken down most basically, two primary approaches have been applied in the alteration of existing buildings. The first is to treat the historic as an artifact and build around it with minimal affectation. This could also be used to categorize new building pieces that are inserted into existing, as if one complete block of program is inserted inside the existing building without relying on the second for structural support.
The second attempts a blending of the new into the old and operates on a gradient from seamless integration to contrasting integration. The closer the strategy approaches the former, however, the more difficult it is to distinguish a method of alteration from a strategy of pure preservation. It is for this reason that a self-imposed guideline should be applied to create a dichotomy: any intervention should be clearly expressed and discernible from the existing fabric. With the two primary strategies identified and loose definitions to accompany them, sub-strategies, which are joining, supplementation, insertion and emerging, can be defined. First, joining brings two parts together with neither relying on the other, except for in their relationship as a designed whole and the physical joint between the two. This sub-strategy is most useful in artifacting because it has the lightest touch on the existing fabric.

Second, supplementation is a stabilization of the existing to prepare for the new, including fortifying structure, preforming patchwork and other repairs. Next, insertion is an intervention that uses the existing building as an envelope and minimally affects, except if it forces the existing to use stabilization in the structure. Finally, emerging is similar to insertion but it breaks outside of the envelope of the building to manifest itself on the exterior.

With strategies defined, the principles of Metabolism can be applied in order to allow existing buildings to adapt in continual progress, rather than approaching a project with absolute completion in mind. SoHo provides an excellent case study because of the modular nature of cast iron construction. Not only would the bolted façade be relatively easy to deconstruct to allow new blocks of program to be “inserted,” but also, in a future with less stringent preservation regulations, allows the possibility to expand building square footage through repositioning components. The first issue that must be addressed is the structure of the existing. With the intention of densifying Cast Iron District, the century (plus) age of the buildings indicates that new load will have severe limitation. Load bearing members are composed of traditional masonry walls, heavy timber columns and the cast iron façade. Between the methods of artifacting and blending, only blending is appropriate because, in supplementation of structural capability, the original no longer holds the same significance in the context of the rest of the
building. After a strategy for blending new structure with old is created, program, design, and other non-physical limitations such as scale in relation to the larger neighborhood context and reversibility of the intervention influence which of the other sub-strategies should be employed.
The chosen case study site has been selected for a variety of reasons. First, it is in a centralized location within the Cast Iron District so that the future of Metabolistic Preservation has plenty of opportunity to spread throughout the neighborhood. By placing it at the southeast corner of Broome Street and Greene Street, access to the several subway stations is simple to move all around the city. Additionally, Broome Street is also a primary east-west corridor across the city from the Manhattan Bridge that connects Brooklyn with Manhattan and the Holland tunnel that links the island to New Jersey. During the day, especially during rush hour, Broome is booming with traffic. Pedestrians occupy the sidewalks and streets, making their way from shopping on West Broadway to shopping on Broadway, cars and trucks make their way across town and bicycles fly by faster than the congested auto traffic. The streets of SoHo, however, become all but empty following business hours. Densification would provide a deeper and centralized full-time population base, which would encourage evening activities. Consideration was the building itself, as well. The building, completed February twenty-eighth, 1873, was designed by J.F. Duckworth, a moderately known architect in nineteenth-century Manhattan, and displays better-than-standard architectural design but does not have any particular or specific historic significance. It does, however, occupy a corner lot and the six-bay cast iron structure wraps around from Broome Street to Greene Street in two additional bays, terminating elegantly into the brick masonry structure that completes the façade of the building. This expression of the exterior structure that is usually hidden as a party wall is an opportunity to express the
physical and historical transition in building materials. The interior structure is composed of heavy timber members and a basement exists that reveals itself in the foundation of the above-grade building, acting as steps and containing small circles of glass to allow sunlight into the lower level.
“Discuss what you have learned from early preservation efforts.”

Early preservation efforts have had a long evolution in the United States, beginning with the singular notion that national image could be preserved through buildings of the past, to the thought that people can gain pride in a place with history and use that to define themselves. Through this progression, I have realized that there is a clear thread weaving through the movement from the beginning at Mount Vernon to the start of modern preservation in New York City, despite the occurrences happening in completely different areas. Though not always the most efficient or clear in intentions, preservation has been built up over 150 years and more.

Mount Vernon was preserved for the specific reason that it was being threatened by drinking, gambling, and profitability. The Mount Vernon Ladies Association of the Union was formed to save the estate from these evils and uphold the image that Washington and others fought so hard to earn. Many found this to be based solely on opinion and called it ‘impractical and unscientific because the building wouldn’t be used for practical reasons or forward progress. This “enshrining of Mecca” resulted in dedications and highlighting object lessons more than the preservation of the building.

Williamsburg took a similar route and took an additional step to ensure the quality of the preservation with one difference: no expense was to be spared in returning the town to its historic state. This became a manipulation of history in order to save it. The
demolition of buildings in order to rebuild what was thought to have originally been there molds visitors’ viewpoint toward the history. In other words, the fabric of history was torn in order to replace something that no longer had connection.

This same type of method was also used on Paul Revere’s house in Boston. The renovations were sparked by racism and, unsurprisingly, created a result that was styled into something that preservationists thought would have the most impact on viewers, but Paul Revere himself may not have even recognized. This continued the manipulation of history through selection and demolition to create a sense of national (or ‘true American’) pride.

This led to the New England Movement and, though the theory of Charles Eliot Norton that stated that the demolition of family homes created disorientation, William Sumner Appleton, Jr. led Boston back toward preserving everyday buildings to keep the character and sense of place in the community to achieve the pride that those concerning the Revere house were after. Finally they were on to something: scholarly intentions versus reformation intentions that had been forced on the masses. The analogy of a tree and its rings is used where the trees older rings keep its history and the new continue to grow from the old.

Finally, similar approaches were used in New York City where the notion that civic past can be given a form, through form, endurance, and reforming influence by keeping the existing brought everything together and helped civic pride, characterized in St. John’s Cathedral. Temptations of profit drove the owners to sell but the people fought back. Even in the face of modernization and the requirement of a wider street for the subway adjustments were made to accommodate and keep the building. Finally, after years of fighting, the building was finally demolished and sold off making the land value more important than the building but the lessons learned were not forgotten and applied to further historic preservation in the city.
“Assess the role and success of New Deal programs designed to preserve heritage through documentation.”

The New Deal programs were successful in many ways, not just in creating jobs for the unemployed during a difficult time in American history, but also in creating parks for the population to enjoy. Additionally, the programs saved and recorded important buildings, battlefields, and historic areas through subsequent programs that tell the history of the country through a visual means. Several factors affected the emergence of historic preservation in the 1930's, including the number of historic sites in the National Park system quadrupling almost over night due to ‘governmental reorganization,’ the national public realizing the importance of such sites for their history and cultural appeal, and the need to create jobs during the Great Depression. The Antiquities Act of 1906 provided a framework for the National Park Service to build upon and Horace M. Albright took on the challenge posed by the new desire for public historic sites.

Albright appointed Verne E. Chatelain to head the Historic Division of the branch of research and education in the National Park Service and Chatelain quickly devised plans to “Breathe life
into American History” through the preservation of historic sites. As his first success when fully in control, Chatelain began the acquisition of Morristown, New Jersey where the Continental Army was encamped during the winters of 1776-77 and 1779-80. Realizing that this site qualified as a historic site for its “national interest,” because of possessing “outstanding value” from a “historical point of view,” Chatelain successfully created the national park which became a perfect example of a national historic park and was a catalyst for the distinction of the historic program within the National Park Service. The success of the park rivaled the scenic program of the West.

Soon, President Roosevelt approved executive order 6166 in 1933, to help create jobs, which quadrupled the number of historical places in the national parks service, unified all of the parks and monuments into one system, and hired historians to execute National Park Service programs.

Born from these programs was a division called the Historic American Buildings Survey, or HABS, which supplied jobs for unemployed architects and drafters. For six months, buildings deemed to have historical or cultural significance were measured, drawn, photographed, and recorded in great detail. The program was so successful that it became chartered by the National Park Service in 1934 and, in 1940, expanded to Boston, Richmond, Saint Louis, and San Francisco. The HABS program provided, by 1941, comprehensive documentation of 6,389 structures with 23,765 sheets of drawings and 25,357 photographs of important American historical resources.

Because of the success seen by the HABS program, several other programs came to fruition and prompted Director Cammerer and Secretary Ickes to recommend a division on historic American buildings and antiques in 1934, called the Branch of Historic Sites and Buildings. This made it possible to receive donations of property and currency, which, in turn, would allow the new division to purchase and/or restore buildings to add to historic places. The instatement of this program made two other important events necessary for the National History and Preservation movement. They were the passage of the Historic Sites Act, and the Establishment of the National Parks Trust Fund Board.

The Historic Sites Act pushed the National Parks Service forward when it was enacted in 1935 and allowed the Secretary of the Interior to do several things that would keep the programs moving forward. First, it allowed him to deem value to historical and archeological sites, buildings, and objects as pertaining to United States History. Second the ability was given to acquire property through gift, purchase, or other means without the consent of Congress. Third, agreements could be made with individuals and local governments to preserve, maintain, and operate the properties that were obtained. Fourth, teaching and research programs were set up.
in motion for the public to learn about the historical significances. Fifth, the ability to restore, reconstruct, rehabilitate, preserve, and maintain historic structures, sites, and objects. Finally, an advisory board for Historic Sites, buildings and monuments was banded which could supersede the National Park Service Advisory Board. The sum of these parts was a more streamlined, controlled, and liberated Historic Sites division of the National Park Service. Soon, the program was so successful that it became necessary to create guidelines for historic site selection and donations. Of the 564 historical sites and 334 archeological sites inventoried, only sixteen sites were recommended for full historic site status.

As a result of the success of the National Park Service and the determination of hardworking people, many of the programs still exist today and raise awareness of an important past that the United States has grown and thrived from. Stories can be told and culture maintained through the buildings, sites, artifacts and records thereof that the Historic Sites Board, HABS, and many others have worked hard to create.

All References Are Taken From:
Harlan D. Unrau And Frank Williss, *To Preserve A Nation’s Past: The Growth Of Historic Preservation In The National Park Service During The 1930’S*. 

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9  Page 34, Paragraph 2
10 Page 39, Paragraph 2
“Should The Mecca flats have been saved from demolition? Should Crown Hall influence the views expressed?”

“Property rights versus human rights.” This statement made by Illinois Senator Christopher Wimbish embodies the argument that can’t be absolutely concluded in arguments of historic preservation versus demolition. Whether it is more important to maintain a dilapidated building full of tenants for the tenants sake, or if it is more important to demolish the ‘blight’ on a campus / neighborhood / city and build something that will ‘better serve’ one or all three. The modern movement and its ‘progress’ affected many properties in this way, including the west end of downtown Cincinnati, and this is especially true in the case of the Mecca flats. A building with its historic roots in the boom precluding the Chicago Columbian Exposition of 1893 and the first example of a style of apartment houses that popularized suburban living in Chicago, lost in the argument made by Illinois Institute of Technology that property rights and human rights were one in the same (for some) in this case.

In this particular case, it is important to understand the history of the Mecca flats in order to also understand its relationship the dilemma that affects historic preservation when dealing with the
clearing of a site. As previously mentioned, the Mecca flats began as an excellent solution in the compromise of urban and suburban living. Through the use of a courtyard garden and several different entryways, tenants were afforded the luxury of the feeling of a yard when entering their homes, as if they were entering a single-family residence in the suburbs. This trend caught on with many other apartment buildings to be constructed around Chicago but the downfall of the Mecca came with the other borrowed innovation it employed. A method borrowed from office buildings downtown, a naturally lit atrium was included from which apartments were accessed. This was problematic for the comfort of the tenants because the feeling of a smaller residence was lost when navigating the cavernous atrium, on display to the entire complex, towards an apartment. This, however, wasn’t the initial downfall of the complex. When the Mecca was built just before the Columbian Exposition, apartments were not leased long-term, they were rented as hotel rooms to fair goers. Though profitable at first, when the Exposition ended, national economic hardship prevented renters from staying. Because of this, rent was lowered and lower-class tenants moved in, density became much higher than it was ever intended because tenants would take in renters to help pay bills, and the neighborhood began to be absorbed into what was called the ‘black belt’ which all made the building less desirable to people that would have ability to demand/enforce upkeep. Within these times, the building was bought and sold; the neighborhood became famous for its jazz musicians (which featured the Mecca in negative connotations, such as adultery and other ‘temptations and evils’) and finally the property ended up in the hands of the Armour Institute, a school and mission, which shared the block. Armour soon joined with Lewis Institute and plans were devised for the demolition of the Mecca building to make way for a more modern and safer (gentrified) campus. Though a profit was coming in from the rent collected from the apartments, school president Henry Heald stated “I really believe that [the Mecca] is worth more to us torn down than in its present state,” and pushed to evict over 1000 residents to demolish the building. Resistance was met and Senator Wimbish made his attempts to save the Mecca, which ultimately failed. Illinois Institute of Technology, after a long battle, evicted all tenants, demolished the building, and Mies designed Crown Hall, the current architecture and planning building for IIT and serves its purpose in one of the best technical schools in the country.

Back to the initial idea and the question property rights or human rights, which is more correct? The case of the Mecca is a particularly difficult one because of the fact that the site did give way to a fantastic example of modernism that serves its new users very well and, I would imagine, inspires them to create great design and aids in their path to adding to the world’s built environment. Could it be argued that the pursuance of the best education in the best facilities possible is a ‘human right?” I think so. Are the student’s education and the school’s prestige more important than the lives of the people that were displaced? Or, in other words, does Crown Hall have any bearing in the argument? Here, I am not so sure. It doesn’t help that much of the leverage that was used came from the fact that
IIT claimed that gentrification would create a better neighborhood but, in fact, despite the demolition, the demographics remain the same. It is a grey area and a difficult slope to navigate. Similarly, Cincinnati’s attempt to revitalize an area with modernist ideals did not gentrify and revitalize the west end of downtown; it split it with ‘progress’ (the interstate) and separated further from what is now being proven as a still struggling downtown and a city laden with crime. Additional and similar challenges are ahead for Cincinnati and the Over the Rhine district.

Though Modernism had many good intentions and successes, it is difficult to understand fully whether all parties involved are being served to the best ability. In the case of the Mecca, I lean towards success.

The role of local government in the preservation of historic landmarks and places has changed dramatically since the first half of the twentieth century. Coming out of a stupor fueled by modernism and promises of progress, many outspoken citizens, architectural historians, writers, and government officials pushed legislation through at the local level, removing the need for federal acknowledgement and gaining control of historic preservation. Though there were cases before, and after, New York City represents the first time that a concerted effort from the parties listed above came together to put a stop to the demolition of important cultural landmarks, resulting in legislation giving a preservation committee permanent power to save these landmarks.

The catalyst for this involvement was a structure that was scheduled for demolition by Robert Moses; the Castle Clinton, though having many uses including artillery fortification, meeting hall, concert venue and aquarium, Moses it was deemed less worthy than his Brooklyn-Battery Bridge. Only an appeal to President
Roosevelt saved the historic landmark\textsuperscript{1}, which gave realization that, if other important structures were to be saved, more expedient routes needed exploration. This sprung architectural historian Talbot Hamlin into creating his ‘Tentative List of Old Buildings in Manhattan Built in 1865 or Earlier and Worthy of Preservation’ and began the preservation movement with the Municipal Art Society.\textsuperscript{2} Additionally, in 1964, New York City Council passed a resolution to create the ‘New York City National Shines Advisory Board,’ which didn’t have much (if any) power but officially displayed the city’s interest in historic preservation.\textsuperscript{3} Here, in his 90’s, Albert S. Bard drafted, and with the help of Senator MacNeil Mitchell, set into legislation, a bill that allowed the city to create a landmark commission that was “to provide special conditions or regulations for the protection, enhancement, perpetuation, or use of buildings having special character or special historic character or aesthetic interest or value;”\textsuperscript{4} this legislation came to be known as the Bard Act.

In 1958, when a portion of Brooklyn Heights was threatened by demolition, Otis Pratt Pearsall, a lawyer, began searching for a way to save the neighborhood and found precedence in Beacon Hill in Boston. This prompted him to seek support from the Municipal Art Society which, in turn, created the Committee on Historic Architecture which gathered historical information on Brooklyn Heights, documented the area, and when combined with the City Planning Department’s announcement of citywide rezoning, it marked the first time the Bard Act was put to use in a collaborative effort.\textsuperscript{5} Next, Carnegie Hall was scheduled for demolition. This is the catalyst for public and media involvement where popularity of the venue encouraged legislation to save the building. This momentum was used, along with the Bard Act again, to create a committee dedicated to making Brooklyn Heights a historic district. Here, another shift occurred; the Bard Act was used to “create legislation that would allow designation by administrative action outside the zoning process and without special legislation for each contemplated district.”\textsuperscript{6}

The next important piece was the involvement of the City Planning Committee, which came with James Felt when Harmon Goldstone and Geoffrey Platt approached him to help write to Mayor Robert Wagner asking to help with preservation efforts. As a result, in 1961 Mayor Wagner created the Committee for the Preservation of Structures of Historic and Aesthetic Importance, which allowed for collaboration with other committees and only gave the power to deem landmark status but not to prevent demolition.\textsuperscript{7} Around the same time, Jane Jacob’s book “Death and Life of Great American Cities” is released which demonstrated how new planning strategies of clearing for social housing and highways was effectively killing cities. This book, along with articles written by Ada Louise Huxtable, generated quite a bit of

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public and professional support, marking a ‘paradigm shift’ for citizens and the preservation movement. The new buzz aided Geoffrey Platt in submitting and the approval of the creation of a permanent Landmarks Preservation Commission. This new committee was given funds to hire employees to write legislation aiding in the rescue of landmarks. Aside from having a budget, the commission was different because it was what finally attained legal power to save buildings.

Pennsylvania Station became the next building to come to the chopping block and created a large stir of its own with white collar and notable figures (such as Jane Jacobs and notable architects) picketing. Unfortunately, Penn Station was demolished but the good that came from it was the draft law that would, once and for all, give city representatives the right to input in private plans for landmark destruction. The draft was delivered to the Mayor’s office, with intelligently placed wording and throwaway legislation for the real estate opponents to pick through, and sat there while other buildings were being raised. In typical politician fashion, instead of reading the draft to stop the destruction, the Mayor named “Landmark Preservation Week.” It wasn’t until the Brokaw Mansion was demolished, and the city’s expression of outrage, that the Mayor submitted the legislation to the City Council for review. This submission marked another change in preservation views from “should historic landmarks be preserved?” to “how and which landmarks should be preserved?”

On April 6th, 1965, after public, media, and professional support, Mayor Wagner signed the bill into law, which gave the local government the power to designate historic buildings and districts, as well as the power to prevent historically significant buildings from being demolished.

Grand Central Terminal is an example of the new bill muscles being flexed. After going through many plans and iterations of demolition, addition, and encasement by modernist architecture, Grand Central was protected by the Landmarks Preservation Commission and Local Law 45. Lawsuits ensued because the owner, Penn Central Transportation, felt the land was worth more than the building and Fifth Amendment rights were being breached because a reasonable amount of profit was being generated by the location. For the first time, Historic Preservation was brought to the Supreme Court and PCT lost the battle.

So, with the gradual expansion of local power and the example of Central Terminal displaying the use of that power, do I think that the preservation law represented a reasonable expansion of power? I do as long as the reasons for preservation are great enough to outweigh the usefulness of something new. Penn Station, for example, could have benefited by the amendment. I think that its replacement, Madison Square Garden, is awful and Penn Station was much better in terms of aesthetics. However, the station lost much of its usefulness and the idea for the use of land wasn’t necessarily a bad one. If the preservation board (or a similar group) had some sort of say in what would replace it, I
think we would have a much better solution today that fits better aesthetically.
Describe the relationship between historic preservation and economic development. Should preservationists concern themselves with the problems of gentrification.

It has been shown that historic preservation, and the establishment of historic districts more specifically, can be a very useful tool to revitalize deteriorating neighborhoods. Two districts in Denver, Colorado, Larimer Square and Lower Downtown (LoDo), and the North Benefit Street Neighborhood in Providence, Rhode Island demonstrate this very well. In the case of Larimer Square, imminent clearance sparked thoughts of personal profit from turning the ‘skid row’ into an upscale thriving attraction fueled the preservation efforts. LoDo, which was once a thriving railway center, became dilapidated and underused due to motorization and industrial zoning. Initial plans to clear areas of downtown missed the area, an opportunity that planners sprung on to change the zoning from industrial to mixed-use residential, which allowed preservation-sensitive private investors to start grassroots preservation efforts to bring permanent residents back to LoDo. Finally, the Benefit Street Neighborhood was another private investment opportunity, though this time it was for company profit. Each of these cases introduces a very sensitive gentrification matter that is slightly unique in all three areas. Whenever there is positive economical momentum for a community, it seems as though someone is displaced.
In an attempt to revitalize downtown, the Denver Urban Renewal Authority created plans for ‘urban renewal’ or, in more common terms, ‘urban clearance’ in 1963. This plan, called Skyline, was to clear 117 acres of historic buildings in downtown Denver, within which an area of specific interest to businesswoman Dana Crawford was included. Crawford, realizing the inefficiencies of clearance and wanting to capitalize on an increase in tourism after WWII, combined historic preservation and the principals of urban clearance (functionalist, modern systems) to define a “unique civic identity” and to create a (more than) sustainable recreation district for people who worked in Denver. By painting an interesting and propagandized version of Larimer Street’s history, Crawford was able to bring curiosity to the district where she purchased seventeen buildings at a prices valued not for the dilapidated buildings, but the land they sat on, to create Larimer Square. Soon, on June 21st, 1971, the Square became Denver’s first historic district and on May 7th, 1973, it was listed on the National Register of historic districts. These tactics were successful, bringing more people to Larimer Square and, by 1985, rental of lease space jumped up to twenty dollars per square foot from eleven cents per square foot in 1965. Additionally, Crawford eventually sold the properties, which she bought for less than one million dollars, for fourteen and a half million dollars in 1986. All of this, however, did have its price, socially. Pre-Larimer Square tenants were displaced and the high lease cost prevented small business owners from entering the marketplace. Also, Crawford’s true interest in historic preservation versus profit was brought into question when several buildings on the adjacent Market Street were torn down in favor of a parking garage.

Also in Denver, LoDo became Mayor Fredrico Pena’s legacy, who was elected into office with the slogan “Imagine a great city.” In the Downtown Area Plan in 1986, Pena specified LoDo as one of the cornerstones of this vision. Though not included in the plan, creating a historic district from the area was not difficult, because Denver residents watched the city’s sense of identity washing out with people moving to the suburbs. Removal of elevated streets and the decision to incorporate an “overall unified vision” for LoDo was made to create an urban theme park of the west, which kicked the revitalization movement into gear. Difficult economic times in the 1980’s created mass vacancies in office buildings in the LoDo area and significantly lowered property values. This afforded preservationists the window of opportunity to turn LoDo into a historic district, though met with some amount of opposition from owners. Fears that historic district status would cause property value to plummet even further were quelled when they were actually stabilized and a new vision of an artist’s community, reminiscent of New York City’s SoHo district, was imagined. All of these efforts created a successful downtown area; soon, however, the addition of the Colorado Rockies, a Major League Baseball expansion team, and the construction of their stadium, Coors Field, at the
north end of LoDo brought sports bars, drunken fans, and high property value, pushing the artists and galleries out of the community. Though affecting a different type of people, the success of Lower Downtown Denver hinged on the displacement of another demographic.

The last example of historic preservation as a revitalization tool is the Benefit Street Neighborhood. Key to the rehabilitation, the Providence Preservation Society was founded in 1956 and began saving historic homes by cleaning them up, which elevated their value and then sold them at a market price. By setting an example and creating a business model of sorts, preservation became accessible to middle class families who would appreciate the previously neglected Victorian homes. Threatened by the expansion of Bryant College, Rhode Island School of Design, and Brown University, preservation efforts were made to save Benefit Street with an unlikely spokesman; a member of the board of trustees and descendant of the Brown namesake, John Nicholas Brown determined that, instead of destroying dilapidated historic homes, they should be restored to “[Bring] an old and graceful section of the city back to economic stability.” City officials backed Brown on his statements due to lower city populations as a result of industrial decline and white flight and thought it would bring back a solidified tax base. Federal grants were awarded and Antoinette Downing created a mapping of 1350 of 1700 buildings in the College Hill area that described historical significance, architectural quality, and physical condition. This survey was used in the determination to revitalize Northern Benefit Street through gentrification and real estate development. This opened the doors for many private, for profit, real estate firms to begin buying, fixing up, and selling historic homes in the neighborhood; they did well. These efforts also created market demand and, in turn, the entire neighborhood increased in value. Additional properties were acquired through eminent domain and ‘spot clearance’ was used to destroy certain structures that were deemed unfit for the historic character of the community. This too raised property values. A final move was to create scale limitations, which prevented buildings housing more than two families from being preserved or constructed. The sum of these moves effectively continued to force lower income families out and, despite some last minute efforts by Downing to provide multifamily housing, gentrification was completed.

As shown through the examples, historic preservation can be used as a very effective tool to not only stabilize the value of historic neighborhoods, but also make them inaccessible for some of the population. Ultimately, I think that gentrification can be a dirty but necessary evil in order to keep areas rich in history and character alive and thriving. I think that it is possible, however, to prevent full eviction of less economically stable people. Downing was on to something when she decided to push for multifamily housing, but it should have been planned from the start rather than as a guilty afterthought. I feel that diversity is
important to neighborhoods and that gentrification can and should be considered in preservation though it should not necessarily affect overarching goals of rehabilitation and historic preservation at a larger scale especially if 'skid row' is the first thing to go.
“In an eight-page essay assess the three sites we visited this quarter: Sharon Woods Heritage Village, William Howard Taft Birthplace, and your Architreks tour. Your assessment should include some discussion of the preservation goals and philosophies of each of these sites and their organizations (Historic Southwest, the National Park Service, and Cincinnati Preservation Association, respectively). How successfully do you think the goals were achieved? What types of improvements might be made?”

There are many ways to create a historic preservation site and all are subject to the governing organization’s choices on how to represent the history that has occurred at the location. Three examples of this can be found in the Cincinnati area and will be discussed in this writing. The first is the Sharon Woods Heritage Village, which is managed by Historic Southwest, and is a conglomeration of historic structures, not necessarily from the same place or time period, and is used primarily as a teaching tool. The second location, kept up by the National Parks Service, is the William Howard Taft Birthplace, is a reconstitution of the former President and Supreme Court Justice’s childhood home on Mount Auburn, used as a historic landmark, teaching tool, and monument to Taft. Finally, Architreks Tours are sponsored by the Cincinnati Preservation Association and are various tours of historic areas...
around Cincinnati. These include some of the most noteworthy neighborhoods such as Clifton, Mount Adams, Over the Rhine, and two downtown tours. I will specifically discussing the downtown south tour, which included buildings such as the Carew Tower Complex, the Lombardy Building, the Gidding-Jenny Storefront, the Ingalls Building, Dixie Terminal, Queen City & University Clubs, the Guilford School, Lytle Park and the Taft Museum. All of these efforts of historic preservation have their benefits and their downfalls, which will be discussed here. User experience is a great factor in the successfulness of a historic site so my impressions will be discussed of each historic place. Additionally, the three locations have their own qualifications for being called ‘historic’ but have different ways of expressing this quality. These are discussed best in terms of the integrity of the place, or how accurate it is to what it is representing, the interpretation that the controlling organization takes of the place, time, person(s), etc., and the influences that the organization has, such as the desire to create effective teaching tools, gaining interest, or maintain patriotic visions. Each of these topics seemingly has an affecting relationship to each of the others in the cases being examined. As one category increases, for example, interpretation, another category seems to drop some amount, in this example, integrity.

The first site to be discussed is the Sharon Woods Heritage Village. First of all, my initial impressions of the site were slightly negative, though this quickly changed. Driving in, there were hardly any people around the entirety of Sharon Woods. Signage was adequate but confusing at one point and I almost took a wrong turn. After parking, there was little signage to indicate how to actually access the village and I went through the visitor’s center, where there was no attendant, and out the back where I saw site; but a fence separated me from my goal. After following the fence around, I discovered that the entrance was to the far right of the visitor’s center and barely discernable as the correct entry point. When I actually entered the village, again, there was no signage to indicate where I should be headed to pay the entrance fee and let the employees know I had arrived. After entering through the incorrect entrance, I found the women working for the day, paid the fee, asked for an informational brochure, which they didn’t have, and went on my self-guided tour. The first thing I noticed was the large farming machinery and saw that it was covered in a shiny coat of protective oil, as if it was ice freezing it in motion. After this eerie observation, my attention moved to the road that lay across the river and cars driving back and forth. This did not add to the effect of feeling like going back in time. This, however, was the catalyst for my enjoyment of the heritage village; as I kept walking, the link to the modern world slipped away as the trees surrounding the structures became thicker. The road, seen in contrast to the thought of ‘historicness,’ only furthered my realization that this was a new type of place and time. The buildings of the village are very well kept and are pleasing to the eye. Each representing vital components of a successful town of the past, including a barn, the classic farm house surrounded by a white picket fence, a rail station with real tracks (to and from nowhere) in front, and a Presbyterian Church. Peering through the windows of the general store there were items like candy for visitor purchase as if they were truly in older times; here I noticed that the pane of glass I was looking through had been replaced...
recently as it didn’t carry the wavy characteristics of still-moving glass that the surrounding panes had. Similarly, another building at the end of the village seemed to be a new addition, judging by the construction materials surrounding and signs on the front door. The building looks to be in the process of rehabilitation but it currently serves as a reminder of what the surrounding buildings could have looked like if they were left to nature without the care and upkeep of Historic Southwest.

All of the qualities mentioned relate to the integrity, or in other words, the accuracy of the Sharon Woods Historic Village. The first, and most important, item of note is that the village is assembled of structures from completely different areas and don’t have any direct connection except that there was probably a building of similar typology in every successful town in similar time periods. Similarly, time is a distinctive and delineating factor between the buildings in the Historic Village. Even if each town that the buildings came from had similar surrounding structures, they probably wouldn’t have looked like those of Sharon Woods. These items, to me, are fine because the goal of Historic Southwest seems not to be to accurately reproduce a single place, but to create a haven for endangered structures and produce an educational tool. It is really about the idea of a village of yesteryear, not trying to accurately recreate it. Here, integrity, interpretation, and influence are closely linked. Historic Southwest had the primary goal to save representative structures first so their interpretation was that direct relationships between the buildings were not as important. Because of this, the village as an educational tool becomes secondary so influence comes more from a pure preservation standpoint than any other. In a way, it leaves some amount of interpretation up to the visitors as well, which I think adds to the integrity of the village, despite its mish-mash of structures.

In contrast to this is the William Howard Taft childhood residence. When I first arrived I was ushered into an auxiliary building, which was new construction, and brought into a room where I was to watch a video of the history of the Taft family, concentrating mostly on Alphonso Taft and William Howard Taft. The video was interesting and contained fact but felt a bit biased. Everything was positive and great for the family. Even the passing of Alphonso was construed into a positive because it allowed William Howard to become the governor of the Philippines. After the video, I was instructed to push a few buttons in front of Charlie Taft, William Howard’s son, as animatronics. As informative as the information that Charlie conveyed was, I couldn’t get past the way that this fake scene with fake Charlie and fake extra dialogue about catching big fish was so strange and became so distracting that I don’t remember anything that was actually talked about. Then, seemingly popping out from nowhere, a man named Dennis greeted me and led me out of the auxiliary building and up the steps to the actual Taft house, stopping to explain that the land that the juvenile detention center sat on was once Taft-owned land. He also explained that, since the building was bought and sold a number of times since being owned by a Taft, the structure had been changed several times, including additions to the outside and the sectioning off of several separate apartments at one time; all of this was torn out or restored to what the National Parks Service believed to be accurate to William Howard’s childhood. This
meant that, as we walked through the rooms, many things were either reproductions of items described through family letters or guesses on belongings representative of the time period. This fact was explained as one of the first items of note when we entered the house but after that it was ignored and everything was treated as if the Taft family actually used it. When I asked whether or not something was original, I sensed a bit of annoyance in Dennis’ voice, though he was very nice and answered all of my questions. After seeing all of the front rooms, which were decked out in period furnishings, we walked back to the much less impressive master bedroom where only William Howard’s desk stood, enclosed, in the middle of the room. A bit disappointing after being artificially transported back to the late 1800’s. Upstairs was more of the same; displays containing factual information, cartoons, and memorabilia from the Tafts. I think that I was so dissatisfied with this part of the experience because there was a big, mostly empty, room in the auxiliary building that would have been plenty of space to contain all of the displays and open up the rooms for more of the house museum. Also adding to this feeling was that most of the information in the displays was a repeat of what was mentioned in the film at the beginning of the tour; I guess as an attempt to bookend with similar information and verify itself.

Like the paint over the moldings throughout the house, integrity seemed to be a veneer to display a history that the National Parks Service wanted people to see. All of the emphasis over how accurate everything was to the Taft house made me think, not necessarily that it was inaccurate, but that the things the chose to show were to convey a biased message. This ties into the interpretation of the house. The National Parks Service obviously sees the house first as an educational tool to inform visitors of the history of the former president and chief justice and his family. The problem with this, I think, is that there is too much that is closed off for visitor interpretation of the history because it is delineated so clearly already. This exposes some of the influences that the Taft House has and shows that the educational goal is highly influenced by an extreme patriotic viewpoint that the National Parks Service wants to express. These things, when combined, seem to raise the interpretation scale higher, on the side of the National Parks Service, but moves it down proportionally on the integrity side.

The final case in this study is my experience on an Architreks tour of the Downtown South Tour of Cincinnati. My tour guide, Trudy, was a fast-talking, fast walking, and interesting woman. It became difficult to ask questions during the tour because she spoke so quickly about the buildings along the way and moved on even more quickly. At this speed, we barely finished the tour on time. This was also to the detriment of an attendee in a wheelchair. He had trouble keeping up and Trudy chose some difficult paths for him to follow. The length of the tour, I think is what made things difficult. If it were truncated from two hours and two miles to an hour and a half and one mile, I think the tour would have been much more successful. The information, however, was very informative and gave a great overview of the buildings discussed. There was just enough information to give an idea of what the building used to be, what it was used for,
and connections to other buildings and places in the city to allow for some of my own interpretation of what all of it meant. Also, being relatively new to the city and not knowing much about Cincinnati’s history or the city itself, the tour provided me with a great understanding of what downtown had to offer historically as well as currently. This, as is advertised on the Architreks website, is a great way for visitors to the city to fill a couple of hours and learn about the area.

In terms of integrity, the Architreks tour shines the brightest of the three examples discussed here because the tour is of historic buildings that have been altered over time and the Cincinnati Preservation Association simply state unbiased facts about what the structures were, what they are, and how they connect or are important to other areas of downtown. Though not explicit, the history of the buildings highlighted on the tour is apparent simply because they have not been actively preserved and show the affects of time. This, to me, is the most effective method of preservation. Not ignoring unfavorable portions of history but embracing it as a learning tool for the future and exploiting it as a design feature. This hints at the interpretation of the tour. The Cincinnati Preservation Association views the tours as a way to spark interest in preservation and as a revenue generator. Trudy was a volunteer and I paid ten dollars for the tour, so I would assume all of that money goes to the Association. In terms of sparking interest, the tour solidified, for me, the potential that Cincinnati has to be the “Queen City” that it once used to be and inspires me to want to help in the rebirth that is hopefully coming in the near future. Finally, awareness seems to be the theme for the influence of the tour. Part of the purpose, as mentioned is to make people aware of preservation in Cincinnati, not to sway opinions necessarily, but to inform. I think that this, in contrast to the Taft House, has something to do with the fact that the Cincinnati Preservation Association is a local group whereas the National Parks Service is a federally funded effort. This gives the Preservation Association more freedom to allow individual interpretation rather than trying to express a higher overarching ideal such as patriotism. Interpretation is much less important and therefore it seems that the level of integrity is very high in this case.

Overall I think that the three preservation efforts discussed here are beneficial and successful in their own ways. I do, however, think that the Architreks tour was the most effective in terms of the qualifying categories, integrity, interpretation, and influence. In my opinion, the integrity of a historic place is the most important because it allows for more opportunities to learn and design rather that bracketing in and narrowing a view of what is important.
“What role does integrity play in historic preservation?”

As Catherine Howett points out, there are several definitions for the word ‘integrity.’ First, the *American Heritage Dictionary* defines it as “a rigid adherence to a code of behavior; probity; the state of being unimpaired; soundness; completeness; unity.” Additionally, the word comes from *integritas*, Latin for completeness, purity, and derived from *integer* meaning whole.¹ Further, David Lowenthal points out that, in terms of recalling all things historic, “…It is impossible to recover or recount more than a tiny fraction of what has taken place, and no historical account ever corresponds precisely with any actual past,” which is a result of “…The immensity of the past itself, the distinction between past events and accounts of those events, and the inevitability of bias.”² When the definition of integrity is combined with a concept of history, it seems as if it is impossible to achieve the characteristic of ‘integrity’ in historic preservation, at least in the true sense of the word. Requiring ‘wholeness’ in order to achieve integrity with history unable to be whole within itself creates a paradoxical concept of the term in regard to preservation. So, while considering this, what role, if at all, does integrity play in historic preservation?

¹ Alanen & Melnick, 187
² Lowenthal, 214
When speaking in terms of heritage tourism, as Richard Francaviglia discusses, there are six different types of heritage landscapes, each of which can be placed on a scale from most integrity to least integrity, as I understand them, and are as follows, respectively: passively preserved, actively preserved, assembled, restored, imagineered, and imagically (though the last two will not be discussed as they are completely fabricated, like Disneyworld). There seems to be a direct relationship between integrity (as defined previously) and interpretation when considering these categories. As more interpretation is injected into the history, the less integrity it seems to have. Passively preserved landscapes, for example, are those that are basically forgotten in time and are preserved as they were in past times simply because residents have had no reason to change their way of life. Basically, integrity exists because there is no concept of preservation in these cases and life goes on as it always has and, potentially, always will; there is a collective notion that things are the way they are but not necessarily for any specific reason. I think that the Architreks tour of downtown Cincinnati that I participated in falls in this category. Though many of the buildings discussed were not necessarily preserved to their original condition, they were still there (as opposed to demolished), which is more than can be said for much of Cincinnati’s historic building stock. Again, this method of preservation seems to have a fair amount of integrity because, though it was a paid tour, the motivation did not lie in profit, it was in creating awareness for historic structures. Additionally, and more importantly, the buildings discussed on the tour were still a part of the living organism that is Cincinnati.

The fact that they are still used for something close to their initial purpose in the modern day expresses each building as a part of the past, present, and hints at their future, rather than attempting to freeze them to a certain point in time. This is what Howett would call a “Fundamentally dynamic biotic system subject to change,” and seems to fulfill, most accurately, the requirement of ‘whole-ness’ within integrity.

Next, actively preserved landscapes make a conscious effort to create and to keep a feeling of the past for sentimental reasons or for profit. Because of these two motivations, interpretation becomes a factor because sentimentality includes some memories of a place or time, but not all of them. Similarly, to make a profit, there has to be interest, and to create interest, something that people have a desire to see must be created; the more that is manipulated for this purpose, the less integrity a place has. Also, most motivations are initiated by a singular person or entity, such as a developer, rather than a collective understanding of what the historic landscape is. Without a common understanding like the passively preserved landscape possesses, there can’t be similar perceptions of history, only a suggested perception of history, which provides less opportunity for integrity. Though of varying degree, assembled landscapes are structures that are pieced together from an understanding of what once was to achieve a cohesive look or feel despite a lack of true connection between time, place, and usage. The Sharon Woods Heritage Village is an example of this and, I think, still displays a high degree of integrity, though not because of the definition used.
previously but because of the honesty that it seems to convey. The juxtaposition of several buildings that obviously don’t belong together clearly shows, within the landscape itself, the fact that the site is assembled and is probably not meant to be a historically accurate portrayal of that landscape. This can be contrasted with restored landscapes.

Restored landscapes are those that have been rebuilt or recreated from minimal stock examples or written or documented accounts of what a place used to be. An example of this is the Tyron Palace Gardens where the integrity of the historic landscape was compromised due to conflicting information from pieces of documentation, which leads to decisions that may or may not be historically accurate. Another opportunity for inaccuracy is in the documentation itself. If an author decided to write about what the ideal was rather than what actually existed, then the recreation will be inaccurate and therefore will lack integrity. A more direct example of a restored landscape is the William Howard Taft childhood home. In this case, restoration was based on letters describing the items, furnishings, and textiles in the house, however, not everything could possibly be accounted for and reproduced so inaccuracies must exist: “The truth in history is not the only truth about the past; every story is true in countless ways, ways that are more specific in history and more general in fiction.”

The decline in integrity does not lie in the motives of representation but in the actual representation itself as it tries to convince that it is original and, in fact, stuck at a moment in time. Additionally, further inconsistency occurs because of the guided tour format of the experience; the tour guide injects a level of interpretation of their own, further skewing a representation that is claiming to be historically accurate, even down to the faux finish on all of the moldings of which my guide was so proud.

In the examination of integrity in historic preservation, the idea of conveying a sense of continuity in time flow, similar to Howett’s thoughts on the preservation of historic landscapes, best describes what I think of as integrity in historic preservation. Essentially, because of the amorphous shape and infinite past (and future) of history, it cannot be ‘frozen’ into one moment of time. Because our built environments are dynamic biotic organisms they must be treated as such. Change in preservation isn't necessarily a bad thing, identity can be developed without being completely washed away, much like humans, as they say, lose and regenerate every cell in our bodies every certain amount of time, though we are still considered the same person.

“Nothing ever made has been left untouched, nothing ever known remains immutable; yet these facts should not distress but emancipate us. It is far better to realize the past has always been altered than to pretend it has always been the same.”

5 Alanen & Melnick, 193-197
6 Lowenthal, 229
7 Lowenthal, 412
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Figure 01.01: Digital photograph by author. Cast Iron Building Detail, SoHo, New York City. 11 Nov. 2011. JPEG file. Pg. 05

Figure 01.02: Digital drawing by author, The Island of Manhattan, 02 Nov. 2012. Adobe Illustrator file. Pg. 09

Figure 02.01: Adams, John Wolcott; Stokes, I.N. Phelps, Redraft of the Castello Plan New Amsterdam in 1660, 1916, printed map, color wash on paper, 31 x 40 cm. JPEG file. New-York Historical Society Library, Maps Collection. From: <https://www.nyhistory.org/web/crossroads/gallery/all/castello_plan_redraft.html> Pg. 11


Figure 02.03: Collect Pond, Mount Bayard, New York City, 1798, Digital image, JPEG file. Wikipedia. From: <http://en.wikipedia.org/wiki/File:Collect_Pond-Bayard_Mount-NYC.jpg> Pg. 13

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