BUILDING UPON RUINS:
THE EVOLUTION OF AN URBAN ARTIFACT FROM INFRASTRUCTURE TO PUBLIC SPACE

by

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B.S.N. Northeastern University
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# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>TITLE PAGE</td>
<td>1</td>
</tr>
<tr>
<td>TABLE OF CONTENTS</td>
<td>5</td>
</tr>
<tr>
<td>ABSTRACT</td>
<td>6</td>
</tr>
<tr>
<td>A THEORY OF RUINS</td>
<td>8</td>
</tr>
<tr>
<td>The Monument</td>
<td>9</td>
</tr>
<tr>
<td>Against Preservation</td>
<td>12</td>
</tr>
<tr>
<td>Monuments of Age-Value</td>
<td>13</td>
</tr>
<tr>
<td>Intentions</td>
<td>14</td>
</tr>
<tr>
<td>THEATER - PROMENADE - PUBLIC SPACE</td>
<td>16</td>
</tr>
<tr>
<td>THEATER AND THE CITY</td>
<td>17</td>
</tr>
<tr>
<td>THEATER - CITY - MEMORY</td>
<td>20</td>
</tr>
<tr>
<td>PRECEDENTS AND REFERENCES</td>
<td>21</td>
</tr>
<tr>
<td>Architectural</td>
<td>21</td>
</tr>
<tr>
<td>Other</td>
<td>24</td>
</tr>
<tr>
<td>THE SITE</td>
<td>29</td>
</tr>
<tr>
<td>Construction History</td>
<td>31</td>
</tr>
<tr>
<td>Designing the Headhouse and Piersheds</td>
<td>33</td>
</tr>
<tr>
<td>The Nature of the Site</td>
<td>37</td>
</tr>
<tr>
<td>The Site Today</td>
<td>38</td>
</tr>
<tr>
<td>METHOD OF INQUIRY</td>
<td>40</td>
</tr>
<tr>
<td>PROGRAM AND DESIGN</td>
<td>42</td>
</tr>
<tr>
<td>BIBLIOGRAPHY</td>
<td>77</td>
</tr>
<tr>
<td>ILLUSTRATION CREDITS</td>
<td>81</td>
</tr>
</tbody>
</table>
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Submitted to the Department of Architecture on February 4, 1994
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ABSTRACT

A thesis is about what architecture can be. In my thesis I propose that urban infrastructure built in the late nineteenth-century, can be the foundation for urban public space in the late twentieth-century. I propose that by exploring the value inherent in an existing structure, or fragment thereof, we can derive reasons to retain and perhaps add to that structure, all for the enrichment of the urban environment. The why is the value of the artifact. To explore the possible valuations of the urban artifact I have studied various theories of the ruin, monuments, and their role in urban culture. Writings by Alois Riegl, Aldo Rossi, David Lowenthal, Francoise Choay, Theodor Adorno, Manfredo Tafuri, and Giorgio Grassi, among others, have guided this exploration.

The second part of the thesis is designed to test the proposition by linking the urban artifact with the present. This linkage would be achieved through the design of a new intervention which would be responsive to the contemporary situation. The programmatic ideas of theater and promenade were employed as both the methods of linkage, and generators of design.
The physical characteristics of urban density and form lend themselves to the idea of public spectacle. Within the cultural richness and diversity of the city, places are provided for performance which are both formally planned, as well as incidental. In a like manner, the urban ritual of promenade provides a form of spectacle in its description as, "a leisurely walk or ride especially in a public space for pleasure or display." ¹ The design I propose will provide locations for performance and spectacle in the public realm. The spaces will support theatrical productions which will vary from the organized and rehearsed, to the unplanned and ad hoc. Their backdrops will range from the water to the cityscape, and from the past, through the present, and to the future. Metaphors for concepts central to the art of theater will be exploited and used to tie the artifacts to the theater, and the theater to the site on the water. These include the actions of observation, reflection, and appropriation; and the concepts of time, perspective, and memory.

Thesis Supervisor: Wellington Reiter
Title: Assistant Professor of Architecture

A THEORY OF RUINS

Merely to know about the past is not enough, what is needed is the sense of intimacy, the intensely familiar interaction with antiquity that was a distinguishing and self-defining mark of European thought. To know the past in this fashion demands T.S. Eliot's perception 'not only of the pastness of the past, but of its presence.'

David Lowenthal, The Past is a Foreign Country

In my thesis I have proposed that a portion of the urban infrastructure from the late nineteenth-century can be the foundation for an urban public space in the late twentieth-century. By exploring the remnants of the facade of a headhouse and the pier upon which they stand, I have tried to identify the values intrinsic to these artifacts, and in so doing, the reason or why for retaining, and building upon them. To begin to understand the value of urban artifice I have read different theories of historic preservation and urban ruins. I have found an essay by Alois Reigl particularly insightful and have drawn heavily from this work in developing my attitude toward the site and the artifacts which define it.

The essay I am referring to is "The Modern Cult of Monuments: Its Character and Its Origin," which Reigl wrote in Vienna in 1903 at a time when the movement for historic preservation was coming into its own. Reigl's essay was written as a preface to the legislative proposal for the protection of historic monuments in the Austro-Hungarian Empire. It is an exhaustive work which sets out to define the role of monuments in culture.
Reigl begins his essay by defining the monument. He states, "A monument in its oldest, and most original sense is a human creation, erected for the specific purpose of keeping single human deeds or events (or a combination thereof) alive in the minds of future generations." He then distinguishes between two types of monuments, the artistic and the literary. The artistic monument stimulates the memory of a certain event through visual means, as opposed to the literary monument which uses inscriptions to recall and describe a past event. Next, he categorizes the different types of monuments. He distinguished between intentional monuments, those whose purpose was to memorialize a person and or event; and unintentional or historical, monuments, which he described as monuments of art and architecture. A third category Reigl puts forth is that of the monuments of age-value. Defining these monuments Reigl states:

its value as memory, ... springs from our appreciation of the time which has elapsed since it was made and which has burdened it with traces of age. ...These monuments are nothing more than indispensable catalysts which trigger in the beholder a sense of the life cycle, of the emergence of the particular from the general and its gradual but inevitable dissolution back to the general. 2

Reigl recognizes that the lines that divide these different types of monuments are blurred, as he summarizes:

Outwardly these three classes of monuments can be thought of as contained within one another. While the scope of their memory-value widens.

To the class of intentional monuments belong only those works which recall a specific moment or complex of moments from the past.

The class of historical (or unintentional) monuments is enlarged to include those which still refer to a particular moment, but the choice of that moment is left to our subjective preference. Finally, the category of monuments of age-value embraces every artifact without regard to its original significance and purpose, as long as it reveals the passage of a considerable period of time.

These classes form three consecutive phases of the generalization of what a monument means. 3

It was Reigl's description of the monuments of age-value which made me aware of the reason I chose the remains of pier 54 as my site, and also helped me to decide how I would treat the fragments which were there. Through the years I had passed by the pier many, many times, but never took notice. Perhaps because it was one of several headhouse structures along the roadway, or because it had been stripped of all its ornament and was in a state of disrepair. Only after the piershed and headhouse were torn down, and all but the granite facade bases were taken away did I become aware of the site. In fact I believe that it was the incomplete state of the headhouse facade, and the presence of these partial objects that caught my eye and aroused my curiosity.

There are several reasons why a partial structure can be a powerful stimulant of the imagination. One is in the way we have come to view history and art. There was a time during the Renaissance and up until the nineteenth century that history was regarded as relevant to the present day, and monuments were valued by people because they were thought to represent earlier stages of their own artistic, cultural, and political achievements. 4 During the nineteenth century the idea that all human experience was shared came into question. David Lowenthal has written about this change in attitude in his book entitled, The Past is a Foreign Country. Lowenthal describes the different ways society has regarded

3 Ibid. p. 24.
history throughout time and he suggests that changing attitudes about history was the only constant. In one passage of his text Lowenthal discusses the rejection of the “pedagogic past,” stating that “Nineteenth-century insights progressively abandoned belief in universal human nature, thereby devaluing historical analogy.” He goes on to explain, “When every culture and epoch had to be understood in its own terms, the lessons of history became invalid, and the past ceased to be the great teacher of life.”

Without a need for a pedagogic past the partial object becomes a lure. It does not dispense history, rather it triggers the imagination and at once activates and enables the viewer. While the intentional monument is likely to lose meaning over time because the specific event which it commemorates may no longer have relevance to future generations, the unintentional monuments and the monuments of age-value are more likely to hold their value as time passes. They are each to a certain degree appropriational.

Although we have come to recognize that the lessons of the past may not apply to the present we still long for some connection with our past. Lowenthal describes this desire in the opening quotation when he speaks of a “sense of intimacy” with the past. According to Reigl, “The essence of every modern perception of history is the idea of development. In these terms, every human activity and every human event of which we have knowledge or testimony has its own historical value; in principle every historical event is irreplaceable.” And:

“...everything that has been constitutes an irremovable link in a chain of development. ...The essence of every modern perception of history is the idea of development.”

By what method does a modern viewer form a conscious link with the past vis-à-vis a monument? The monument of age-value transcends the contradictions in the post-nineteenth century view of history in several ways. Through its ability to...

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6 Reigl, p. 21.
express the passing of time, it links us to the past as it underscores the
developmental and evolutionary way we view history today. And as it is both
unintentional and non specific, it allows us to remember history in a non-
pedagogic way.

AGAINST PRESERVATION

I would like to highlight some of the shortcomings of preservation, and in so doing
explain why I chose not to approach the artifacts on the site in a preservationist
mode. The ability of preservation to serve as a link to the past was disputed by
both Reigl and Lowenthal. In his writings, Lowenthal sees preservation as an
acknowledgment of the failure of present day society to connect with its past.

Unwilling or unable to incorporate the legacy of the past into our
own creative acts, we concentrate instead on saving its
remaining vestiges. The less integral the role of the past in our
lives, the more imperative the urge to preserve its relics. Because
we seldom understand what those relics meant, what part they
played, what aspirations they reflected, what values they
embodied in the active life of the past, we do little more than
simply save them. They no longer belong to our actual world;
your no longer stimulate artists and architects to create anew;
your no longer form part of a living past, however much we
respect their survival or yearn to adapt them to modern uses.
Because earlier modes of response to the past are now closed to
us, because much of what survives is now foreign to us,
preservation has become the principal, often the exclusive, way
of deriving sustenance from our heritage.

7 Lowenthal, p. 384.
Reigl was also aware of the inadequacies of preservation and refers to them in the following passage:

For our task, it is indispensable to clarify this difference in the perception of art value because it influences fundamentally all aspects of the preservation of monuments. If there is no such thing as an eternal art-value but only a relative, modern one, then the art value of a monument ceases to be commemorative and becomes a contemporary value instead. The preservation of monuments has to take this into account, if only because it may have a practical and topical significance quite apart from the historical and commemorative value of a monument. Strictly speaking, contemporary appreciation will have to be excluded from the notion of monument itself. 8

If we chose to preserve an artifact from the past we must be conscious of the fact that we are doing so at a time when our actions will be influenced by a specific perception of art value. This art value is contemporary and topical, and therefore will not hold any particular relevance over the life of the monument. The monument will eventually lose its contemporary value. Once contemporary value is lost a monument becomes vulnerable to destruction by a generation which may no longer recognize, or appreciates its meaning.

MONUMENTS OF AGE-VALUE

The monuments of age-value provide a method by which the modern viewer may form a link with the past. When we review the various categories of values Reigl has assigned to the different types of monuments, it is the monument of age-value which expresses the passage of time, and the developmental nature of human

8 Reigl. p. 23.
achievement that goes along with it. Though the monument of age-value does not mark a specific event, it is easily recognized and accessible. Its appeal is universal and so is appropriate for a public space. No specific study of history is required to appreciate the age-value. The experience is primarily sensory, and is both emotive and catalytic.

According to Reigl, monuments of age-value should not be preserved but should be allowed to deteriorate and decay naturally through time and in situ, because "it is precisely for this reason that they provide aesthetic satisfaction." ⁹ This recipe will after the passage of a considerable amount of time, lead to the demise of the artifact. Over time it will decay and eventually deteriorate into an unrecognizable pile of rubble. At this point it loses its age-value for, "there must be at least a recognizable trace of the original form, that is of man's handiwork," ¹⁰ to convey age-value.

From the stand point of age-value, one need not worry about the preservation of monuments, rather one's concern should be with the constant repetition of the cycle of creation, which is fulfilled when future monuments supplant those of the present.

INTENTIONS

"Reuse rather than demolition...would be a permanent contribution to the character of the city."

Steven Holl, Bridge of Houses, New York, New York 1981

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⁹ ibid. p. 32.
¹⁰ ibid. p. 33.
The why behind the action of retaining these artifacts is the age-value they possess. By keeping the wall fragments in their original position on the site and in the condition in which they were found, the viewer is given the opportunity to experience the fragment as evidence of the passage of time, and as a link in the chain of human development. Each viewer will be able to appropriate their own meaning to the artifact. The artifact may also prove to be the trigger which causes the viewer to explore the history of site, and so a person may come to learn about the past in a more active way. Also, in keeping the ruin in place and unaltered a portion of the urban fabric is maintained.

The decision to build upon the pier and thus endow it with use-value is in stark contrast to the treatment afforded the granite wall fragments. I have done this for several reasons. First, to bring a contemporary use to the pier is to enliven and make relevant the site. It is an example of, "a form leaving one function behind to support another." The legacy of the site would be lost to the urban dwellers if they lacked a reason to inhabit it. Second, the addition of a new structure in close proximity to the urban artifacts underscores their age-value, and so heightens the viewers experience.

Finally, it is conceivable that if we attach a new structure to an existing monument, the new structure may wield some of the power described by Reigl, vis a vis, his notion of a shared Kunstwollen:

*Even if we do not limit ourselves to appreciating modern works of art but also admire the concept, form, and color of older works, and even if we prefer the latter, we must realize that certain historic works of art correspond, if only in part, to the modern Kunstwollen. It is precisely this apparent correspondence of the modern Kunstwollen and certain aspects of historical art which in its conflicting nature, exerts such a power over the modern viewer. An entirely modern work, necessarily lacking this background, will never wield comparable power.*

12 Reigl, p. 22.
Theater and promenade are the programmatic elements of the new pier. Shared features of these programs are an integral part of public urban space. These features include procession, performance, spectacle, observation, reflection, and memory. Public space exists for all. To be an urban dweller one must except, if not embrace diversity. The mixing of different cultures and different ways of thinking animate and excite the urban environment. The theater provides a place to exchange ideas in a creative and thoughtful manner, and "to expose and play with behaviors, characters, and stories that not only fascinate us, but upset, distress, shock, and change us." 13

The pier is located on the outer edge of the city in a space that is flat and open. As it hovers over the water, its horizontality lies in stark contrast to the vertical canyons which define Manhattan. The pier, like theater, sits in opposition to our everyday experience. Both occupy special places, "other" places, where we may lose ourselves in the spectacle, or in our thoughts.

Aldo Rossi has always been fascinated by the notion of theater. His designs for theaters incorporate ideas of history, the city, and typology. Rossi sees the city and its buildings as the backdrop for human activity and drama. He acknowledges this in two ways. The first way is by designing his architecture so that it presents itself as a theater open to all, as in the courtyard stairway for the Fagnano Olona Elementary School, (1972-76). A second way Rossi accomplishes this is by bringing the city into the theater, as in his design for the new Carlo Felice Theater in Genoa with Ignazio Gardella. In Teatro del Mondo, (Venice Biennale, 1979), a theater on a barge is moved from country to country, and city to city. Both stage and auditorium, actor and spectator float on water. The ever changing location of the theater and the continuous floating state of performer and viewer, underscores the idea that theater occurs everywhere, and that we are all and at once actors and spectators.

One could view the theater on water as representative of the slippage which occurs within the realm of human behavior. The occurrences which make up our days are not fixed, nor is theater fixed. "...it consists of at least two floating texts. The actors are alive. They can be well rehearsed, but you cannot guarantee their behaviors. ...no matter how fixed a theatrical performance is, it changes with every enunciation of it. It's two shifting, floating, and therefore interactive and transformational events." 14

14 Ibid. p. 97.
vii. Carlo Felice Theater, Genoa.

vii. Set design for Lucia di Lammermoor, Rossi.
ix+X. Courtyard stairway, Fagnano Olona Elementary School.
...yet the collective and the individual nature of urban artifacts in the end constitutes the same urban structure. Memory, within this structure, is the consciousness of the city.

Aldo Rossi, The Architecture of the City

Memory and repetition are the forces behind theater. Actions are rehearsed over and over again. Words are repeated over and over again. Through theater real and imagined events are played out again and again. Through repetition we try to recover something from the past. We reach for something that has been lost to time, for something that is irretrievable. When we reenact historical events we do not seek to change them, we cannot, but we try to understand them. Memory is a force behind architecture, just as architecture is a vehicle for memory.
The reuse of an existing structure or portion of a structure is not a new idea, but it is an important practice. I have compiled a list of precedents which I believe have achieved some of the qualities of reuse which make it an alternative to be considered. These qualities include the new building taking some direction from the existing structure or form, and then expanding upon it both physically and conceptually. The additions are inventive. They are not restricted, but empowered by what came before. The following is a list of some of the projects which I have been studying. The (*) denotes buildings I have visited.

1. Theater of Marcellus* in Rome built by M. Aemilius in 179 BC, (dedicated in 11 BC). This theater was transformed into a fortress in the Middle Ages and in the sixteenth-century was converted into a palace for the Savelli family by the architect Baldassare Peruzzi (1481-1536).

2. National Museum of Roman Art in Merida, Spain by Rafael Moneo, completed in 1991. Merida was founded by Emperor Augustus in 25 BC, and today it is home to what are considered the finest Roman remains in Spain. The building lies alongside and is also built upon these ruins.

3. Tarragona Institute of Architects in Tarragona, Spain by Rafael Moneo, built from 1983 to 1992. Architect's office and studio built on the foundation of the Canonigo Canal building. This project was seen as an opportunity to preserve the ruins. Along with incorporating the high wall of the ruins into the new building, the minor walls of the ruin were actually used to organize the plan.
4. Whig Hall* by Charles Gwathmey, 1970 Princeton University. One of two neoclassical structures which, along with the historically important Nassau Hall, define Cannon Green in the center of the Princeton campus. All but the exterior walls of the building were destroyed after a fire. Gwathmey completely redesigned the interior to meet a new and enlarged program. Three of the original exterior walls remain, while the fourth wall was removed to reveal the insertion of the new structure.


6. Thermae Antoninianae of Caracella*, Rome. Built from 212 to 216 AD. by the Emperor Caracalla. The great circular caldarium was adapted for use as an open-air opera in the twentieth-century. The theater is comprised of a temporary structure which is erected each summer, and disassembled each fall.

7. Roman Theater, Segunto, Spain. First-century BC. ruin currently undergoing controversial restoration with addition by the architects Manuel Portaceli and Giorgi Grassi.

8. Ospedale Maggiori*, Milan. Designed by Antoine Filarete in 1454, this renaissance hospital was partially destroyed during World War II. In the 1950's the architect Lilianna Grassi began a restoration which would go on for thirty-years. Today, a portion of the original hospital has been historically preserved while the majority of the complex is home to the University of Milan.

9. Audubon Ballroom* designed and built in 1913 in upper Manhattan by Thomas Lamb. This building was the site of the assassination of Malcolm X in 1965. Over the past twenty years the ballroom has deteriorated due to neglect and vandalism. This past June construction began on a newly designed biotechnology laboratory for the Columbia-Presbyterian Medical Center. The architects, Davis, Brody and Associates are preserving and incorporating portions of the existing structure into their design. These included the terra cotta facade, and the ballroom stage where Malcolm X was shot.
10. Brooklyn Bridge, New York City. Designed by John Roebling and dedicated on May 24, 1883. In 1987 an addition to vaults under the Manhattan Anchorage designed by the architects Elizabeth Diller and Ricardo Scofidio was built to create a performance space for the production of “The Memory Theater of Giulio Camillio,” by the Creation Production Company. This play was based on the story of the 16th-century mystic Giulio Camillio who was asked by King Francois I to build a magical structure that would convey, upon entering it, all of the knowledge in the world.

14. La Llauna School in Badalona, Spain by Enric Miralles and Carme Pinos completed in 1990. In this project the architects designed a 54,250 sq ft high school in a vacant factory located in a crowded industrial district.
I will be sighting several references from different segments of the worlds of the fine and applied arts. I have included these, because they have helped me gain insight into my investigation of the different possibilities for reuse of existing structures. I have been interested in using models from different forms of art as a way to understand and recognize the possibility of imposing layers of meaning into architectural design, so that my buildings may be capable of conveying an idea. The (*) denotes works I have seen.

1. "La Ferdinanda: Sonata for a Medici Villa," 1981,* and "Das gegenlaufige Konzert," 1987, works by Rebecca Horn. I have noted the works of this German artist because they illustrate a connection between architecture and the fine arts. Both are 'site-specific,' where the existing structure's history informed the artist's work. The first example is noted for her use of the Villa Medici designed by Giuliano da Sangallo in Poggio a Caiano, as the site of her film. The second work, "Das gegenlaufige Konzert" was part of the Skulptur Projekte Munster, 1987. This work was located in the 'Zwinger,' a sixteenth-century tower which was built as part of the city's fortification and which has undergone many transformations during its lifetime. Horn's installation is not romantic or nostalgic, rather it addresses one of the later uses of the tower, that of a chamber for the torture and execution of prisoners of the Gestapo during W.W.I. .

2. "Land of Projection, 1992."* Multimedia work by Bruce Yonemoto, Norman Yonemoto, and Timothy Martin. Exhibited at the 1993 Biennial Exhibition of the Whitney Museum of Art in New York City. This work employs a full scale replica of a statue used by the Rapa Nui people of Easter Island who projected the evolving concepts of their culture onto these stone monuments. In their installation, the artists replaced the statue's original symbolism with the cultural symbols of twentieth-century America. This was accomplished by projecting popular television images onto the statues. According to the artists' narrative which describes this work:
"...and though original meanings of these icons may be lost through time, the shape of them remains to sustain each culture and give them a point on which to focus their creative and productive energies."

This is an example of the appropriation of one's own values and meanings onto another's work. Here the function of the monument remained the same, but the meaning was changed.

3. The burnt metal piers on the Hudson River at the former site of Pennsylvania Railroad Yards, (and the future home of Riverside South), on the westside of Manhattan. This site was developed from 1878 to 1885, by the New York Central Railroad. The remains of the piers were used this past July for the staging of the play "Orestes," by the En Garde Arts Theater Company which is dedicated to producing site-specific theater. In the words of the producer, Anne Hamburger:

"For me, the Penn Yards evokes the same feeling as the play; it is on the edge of society, a desolate empty place with a beauty that comes out of things destroyed in an earlier time. "Orestes" portrays a society in a state of decay."

4. The Chianti Foundation, Marfa, Texas. Renovations with additions to the buildings of the abandoned United States Army Fort D. A. Russell, over the past two decades by the minimalist artist and de facto architect, Donald Judd. The fort was first purchased in 1979 by the New York-based Dia Art Foundation in a collaborative effort with Judd to transform the existing buildings into a museum.

5. "Czech Cubism: Architecture and Design, 1920-1925." This was the title of a recent show at the Cooper-Hewitt Museum which explored the influence of Cubism, including the works of Braque and Picasso, on the architects and designers in Czechoslovakia in the early part of this century.

This Japanese artist's work involves constructions of lumber which he designs to sit on, wrap around, and run through buildings, or the remains of buildings. His works are temporary, built on the site and then dismantled one piece at a time after only several weeks, or months have passed. The artist address the cycle of construction, use, abandonment, and decay of urban buildings.
xiv. Aerial view of Manhattan from the south.
Aerial view of Pier 54 on the Hudson River, New York City, 1992.
The site is a pier which is 100-feet wide and 825-feet long. It stems off a dock which lies perpendicular to the pier. The dock is 50-feet wide and runs along the bulkhead the full length of the waterfront known as the Chelsea Docks. The Chelsea Docks are situated on the western shore of the Hudson River, locally known as the North River, along an area of the waterfront known as the Chelsea-Ganesvoort section of Manhattan. This area stretches from Little West Twelfth Street north to West Twenty-second Street. A total of nine piers were built, (Nos. 53-62, North River).

The district is largely industrial, and is populated primarily by meat-packing concerns. The remains of the elevated tracks from the New York Railroad known as the "highline" are present and pass both along and through the various warehouses it once served. Today, this portion of Manhattan is generally rundown and depressed, with many abandoned buildings and empty lots scattered about.
DEPARTMENT OF DOCKS,
NEW YORK.
GANSEVOORT SECTION.


xvii. View of Chelsea Gansevoort Improvement under construction, c. 1905.

xviii. Pier extensions on the Hudson River, 1913.
CONSTRUCTION HISTORY

The piers were first proposed in 1880 to accommodate the rapidly-growing transatlantic steamship industry. The earliest plan called for piers 728-feet in length, which far exceeded the old maximum length of 530-feet. However, by the time work began on the Ganesvoort section in 1894, it was clear the new piers would soon be obsolete. In 1897 the Chelsea piers were redesigned to lengths of 800 feet in order to meet the needs of the steamship lines and maintain Manhattan’s position of dominance in the transatlantic passenger trade. Around the turn of the century plans by the White Star Line to build the 790-foot Lusitania and the 882-foot Titanic, made it clear that the 800-foot piers would also be outdated before their completion. In a response to private industry, city planners called for piers greater than 800-feet in length to accommodate ocean liners which were anticipated to reach lengths of 1000-feet and more within the next few decades. In 1903, to satisfy this proposal, the Commissioner of Docks of the City of New York made a request to the Secretary of War of the United States to extend the pierhead line 200-feet westward into the shipping channel of the Hudson River. However, the Secretary of War withheld approval, leaving the pierline as defined in 1897 intact.

In order to build piers the required length, excavation landward was necessary. The movement of the bulkhead 200-feet eastward along the length of the Chelsea Improvement required the acquisition of over 400,000 square feet of private property and about one-half mile of existing streets. It is interesting that this excavation was of landfill largely reclaimed from the river, as the pierhead line of 1897 actually stands 1200 feet west of the original shoreline.

xx. Facade of Chelsea-Gansevoort Improvement, NYC. c. 1930.

DESIGNING THE HEADHOUSES AND PIERSHEDS

The Chelsea-Ganesvoort plan was begun one year after the World’s Colombian Exhibition of 1893. This exhibition, also known as the Chicago World’s Fair, capped a decade in which a grass roots movement had been started to “tidy up the land.” 16 The City Beautiful movement which was sweeping the country had its effect on the New York City planners. The following description of the port of New York was written in 1899 by Idell Zeisloft. It appeared in the New Metropolis, and underscores the need for a more aesthetic approach to the structures which were to stand on the new piers:

...are as convenient, expeditious, safe and comfortable as human ingenuity has yet devised, the same cannot be said of the terminal, landing, and transit facilities for which our city is responsible. The stranger arriving in our magnificent harbor catches a glimpse of tall buildings that impress him with the cosmopolitan bigness and progressive modernism of New York, but give him a poor opinion of our sense of art and beauty...he steps out upon the shabby old wharf,... and looks out on a waterfront as squalid and dirty and ill smelling as that of any Oriental port. 17

In 1904 the mayor of New York appointed a commission to make the city more convenient and attractive. The commission was critical of the patchwork nature of the waterfront structures due to their development by individual leasees, and sited the Chelsea improvement as an example of:

"... a unified design and construction that would create harmony and symmetry and a waterfront with an architectural appearance worthy of the city." 18

To achieve this goal the architectural firm of Warren and Whetmore was commissioned to create the city's first passenger ship terminals. Warren and Whetmore was also involved in the design of many prominent New York City buildings, including Grand Central Station and the Biltmore Hotel. Their concept for the Chelsea Docks created conformity and order by designing an unbroken facade of pink Stony Creek Granite and reinforced concrete. The concrete portions of the facade were designed to create the appearance of a rusticated masonry wall. The piersheds and headhouses were two-stories high and had triangular pediments which hung over the entryways positioned at the ends of east-west streets. Ornamental details including concrete sculptures and cast iron globes further embellished these facades.

The Chelsea Piers opened on February 26, 1910, and was heralded as "one of the most remarkable waterfronts in the history of municipal improvements." As described by a reporter:

...the tawdry surroundings that formerly greeted visitors to New York were replaced by a 'waterfront so imposing that the foreign visitor will no longer find false impressions of the great city...' 19

Pier 54 was first leased by the White Star Line and was designed for the most luxurious steamships to be built, such as the Olympic and the Titanic. The Titanic was one of the largest ships of its time and was 882.5 feet long, 92.5 feet wide, and weighed over 46,000 tons. The Titanic sunk on its maiden voyage from Southampton, England, on April 15, 1912. The survivors of the Titanic were rescued by the Carpathia and brought to Pier 54.

In 1934 the White Star Line was bought by the Cunard Line. The pier continued to be used for passenger travel through the next twenty years. As commercial airlines began to dominate the transatlantic travel industry, the piers were used

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19 Buttenwieser, p. 99.
less by passenger liners and more by cargo and shipping concerns. In 1966 the Lower Hudson Regional Plan published a report on the future of the waterfronts of the lower Hudson River, from the George Washington bridge south to Bayonne on the New Jersey side, and to the southern most tip of Manhattan on the New York side.

The study pointed out that the entire area should be treated as a "visual whole," recognizing that an intervention at one point would be visually available to a broad area of the waterfront. The study also noted changes in use of the lower Hudson area. Traditional occupants such as railroads, industry, and ocean-freight handlers, were rapidly leaving. Plans for future use would increase public access to the water's edge. Types of building would include residential, commercial, recreational, and cultural. The recommendation for the area of the river front which includes the Chelsea Piers stated:

"The Chelsea Piers should be retained, perhaps only temporarily, for deep-sea cargo shipping. From 39th Street to about 12th Street,... Railroad yards and cargo piers will probably remain in this area for some time. As long as these uses are appropriate, the Highway can be elevated in this portion. ...From 12th Street to Canal Street,... The highway should be designed here to permit maximum physical and visual access to the River from Greenwich Village." 20

The report also included a then-present-day description of a passenger's arrival to the Port of New York. It echoed the 1899 description quoted above, and describes how the initially wonderful entry into New York Harbor deteriorates into a second-rate experience as the ships approach the westside piers. It seems the aesthetic success of the Chelsea Piers had not been sustained.

During the 1970's a new plan was put forth to redesign the waterfront along the westside of Manhattan. This plan also called for the Miller Elevated Highway to be

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torn down. A new highway was proposed to be built, a portion of which was to be below grade, thus allowing pedestrian access to the riverfront. Westway, as the plan was named, was opposed by various groups for reasons ranging from the environment to the allocation of federal money.

Although Westway was defeated, an interim plan was begun in 1988 with the dismantling of the elevated highway from West 57th Street south to Canal Street, and the redesign of West Street at grade level. In 1990, the State D.O.T., under who’s auspices the piers now fell, decided to tear down the piersheds and headhouses in the Chelsea-Gansevoort section. The Stony Creek Granite wall bases, and the steel framing arches of the headhouse facade were saved only on pier 54, because of their historical significance in relation to the Titanic tragedy. Today, The Hudson River Park Conservancy has been involved in saving what is left of the piers, and is overseeing plans for their conversion to public space for cultural and recreational activities.

SUMMARY

While it is true that each site has a history, this site’s history is rather extraordinary. The fact that this pier was among the longest piers to be built in its time, and that it was to hold the most luxurious ocean liner of its time, the White Star Line’s Titanic is notable. That it was, in fact, the point of arrival for the survivors of the Titanic is also significant, with 1503 lives lost. Pier 54 may be seen as the site of both the brightest achievement and the greatest tragedy of transatlantic passenger ship travel. If people today do not grasp the importance of these facts it is because they are ignorant of the technological revolution and social history they represent. This illustrates the value in saving certain urban artifacts, and these facts represent a portion of what they may teach. The “teaching” I propose is not literal. It is through the existence of the artifact that questions may be raised, which in turn, may lead people to explore and discover the stories of the past.
The starkness of the forms on the site is what first caught my eye. Their images replayed in my mind again and again. I had not noticed these piers when their buildings were intact, and so my experience with this site lead to my decision to retain the forms in their incomplete state. I will not strive to reconstruct the original structure.

It is important for an architect to spend time on the site, if at all possible, in order to understand all of its nuances. As I walked the portion of the site and its adjacencies which were available to me, I began to appreciate several of its physical characteristics. It is a fairly quiet and peaceful site as compared to other areas of Manhattan. The access to the Hudson, and the openness of the sky is quite striking. It presents a contrast to the denseness of the urban grid. The experience of walking through the streets of Manhattan which run east-west presents an open vista at either end. The treatment of this pier could produce a pleasing terminus, as opposed to the disappointing finale often found at the ends of these streets as they open onto Manhattan's edges. It is unfortunate that a good portion of the view of New York Harbor is obstructed by the Sanitation Department dock which is just to the south of Pier 54.
THE SITE TODAY

The pier is comprised of two wooden piers which together form a "T". The first part runs north/south along the river's edge and the bulkhead wall. This portion of the pier is 480 feet long and 50 feet wide. The second part of the pier is 825-feet long, 100-feet wide, and runs east west into the river. The bulkhead wall is built of concrete and masonry and rests on piles and broken stone fill. The piles are set into the riverbed which is approximately 30 feet deep. The river bed of the slips is dredged to a depth of 40 feet at mean low water.

The pier is built on piles spaced six feet apart in transverse rows which are ten feet apart. Under the columns the piles are grouped together and capped. Each row of piles is clamped together along at the top with a pair of transverse timbers. The piles are stiffened with diagonal bracing. A system of ranger timbers which run the full length of the pier are carried by the transverse timbers. They are spaced three feet apart and carry the four-inch yellow pine deck. All of the timber is treated with creosote. The pier is covered with concrete four and one half inches thick with a seven inch crown. The top surface is two and one quarter inch thick asphalt pavement. This pier burned down in 1932 and was rebuilt in a similar manner. Today, the pier is intact and in fair condition though there has been some erosion of the surface slab, and damage to the eastern edges due to impact.
The remaining portion of the headhouse facade is made of blocks of pink Stony Creek Granite. These blocks are from eleven to thirty-four inches thick, twenty inches high, and are cut to various lengths. There are eleven different segments of the facade remaining on the site. They are in their original positions and stand six feet above grade with a one foot stone foundation. The two segments with the entry portals stand nine feet above grade. There is a steel frame standing at the eastern most end of the site on center at the entrance to the pier, the words CUNARD WHITE STAR are still legible on the front. Other portions of the steel frames which formed the facade at the pierhead end of the pier shed are laying on the site. There is also a portion of a pediment detail from the headhouse facade on site.

The entire perimeter of the pier is framed with jersey barriers atop which is eight-foot high chain link fencing. The pier was cleared and opened over this past Fourth of July to allow New Yorkers to view the fireworks display over the harbor. The site is now inhabited by a group of homeless people who have built shelters incorporating some of the granite wall fragments, and along the jersey barriers and chain link fence described above.
METHOD OF INQUIRY

An approach to a thesis should be critical. The response to the circumstances of the thesis should be based on a set of design principles, and each design intervention should support those principles. In the end the design is evaluated to see if it actually refers back to the principles. In the event the design does not support the principles two conclusions may be drawn. The first conclusion would be that the design has failed. The second possible conclusion would be that the principles were defective. Therefore, while the principles will be used to guide the design, the design will be used to test the principles. Though an architectural design can be explained in terms of a set of formal responses to both a physical condition, (the site) and a pragmatic condition,(the program); it can also be explained in terms of an architectural idea, which is based on a critical analysis of architectural principles, and historical precedents.

An understanding of architectural theory allows one to read architectural form. This type of reading analogous to the reading of a work of art. The range, and so the reading of art is quite broad. In works of art based on realism the meaning of the representation is more accessible then is the meaning in an abstract work. But both types of art are enriched with multiple layers of meaning which must be recognized to fully appreciate the work.

As an occupant of the visual realm, architecture must also be read. Obviously, certain layers of meaning are more easily understood than others. As an architect it is imperative that one is able to access the many layers of meaning in the architectural forms which form the physical realm. This recognition is not easily come by. Even after multiple visits to a certain buildings, and careful study of its architectural intentions, there may still remain ideas yet undiscovered. This potential for the richness of meaning and the complexity of ideas in the forms of
The idea of appropriation in a work of art is essential to this thesis, because the thesis is based on the incorporation of an architectural ruin into a new construct, and a ruin is an ideal object for appropriation. A ruin is evocative by nature, or rather by its apparent 'age value,' and this is why a ruin invites appropriation. A ruin provides the viewer with instant access to memory which in turn evokes feelings, but each viewer assigns her own memory to the ruin in a manner which is selective and subjective.

A ruin is a model of a form which embodies meaning. Many questions arise from this rather simplistic point of view, such as who's memory, which meaning, and who decides? In my proposal, I noted the current restoration taking place on 42nd Street in New York City. I discussed the various twists and turns of its plan over the past decade, and suggested that we still do not know what final form the street will take. The point of this example was that only one of many possible outcomes is realized, and so only one of many possible stories is told.

A study of the thesis site reveals the many histories attached to the artifacts which are present. In speaking with community activists I learned of the different causes each supported, and would note that this support was quite passionate. It is not easy to put aside these opinions when considering a new proposal for the site. Rather than discount their views, I have considered them along with other site information, to define what I perceive to be an appropriate intervention on the site.

\textsuperscript{21} Riegel.
PROGRAM AND DESIGN

The search, and eventual choice of a site for my thesis was based almost entirely on the concept of age-value. During the research phase I discovered its historical value. In determining its artistic value, I made very subjective judgments according to my personal aesthetic, and also on which physical characteristics of the site I wanted to develop. My decision to remove the steel entry arch from the site, and theoretically retire it to some museum where its considerable historical value can be appreciated, were driven by my design intentions. The strong vertical presence of the steel entry arch would have subverted my desire to highlight the planar and surface qualities shared by the pier and the water.

Formal considerations include:

- The planar quality of the site, and maintaining the horizon line through the creation of a 'new' synthetic site, a second pier. These primary planar elements are the pier and the surface of the water. A secondary planar element is the 'highline,' which is the N.Y. Central RR track which runs through the warehouses adjacent to the site.

- The piercing, rupture, and connection of the planar elements.

- Locating the body in space, and registration of the human scale on the megastructure that is the pier.

- The creation of a "dynamic" promenade. "The public promenade, a bridge is more than getting from one place to another. It is a statement of coexistence and diversity." 22

- The reflectivity of water.

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THE WALL FRAGMENTS

The theory which informed the design process was, as noted earlier, Reigl's definitions of monuments. Having decided to leave the wall fragments in their found state, the next step was to program this portion of the site. The idea that the ruin was an object upon which to project one's own experiences and meaning, helped to drive the idea of creating a garden for contemplation, as well as, an inviting point of arrival onto the site. An exterior fence was added to the eastern boundary of the site, thereby releasing the wall fragments from their function as barrier. The wall fragments on the northern portion of the site were re-employed, along with a backdrop of trees to create a small open air theater at the water's edge adjacent to the pier. (Please see the site plan).

THE PIER

There are two aspects to the treatment of the pier. Expressing each, required giving the pier two distinct characteristics. The lower level of the pier is the work area, loaded with program and activity. The introduction of program was necessary to activate the site. The program I developed was one which surrounded the notion of theater, and played on the concept of city as backdrop for drama. On the upper deck, or the new pier, an effort was made to express the contrast between everyday and other. That is, to create a space where one may move away from the city, looking out, and then to look back. The two contrasting themes, one active and lively, the other more introspective and contemplative, were expressed in the fairly intense articulation of the lower deck, and the minimalistic design of the upper deck.
The pier is 825-feet long, and 100 feet wide, giving it an area of 82,500 square feet. The addition of a second level or new pier, doubles the area to 165,000 sq. ft. The idea to ‘load’ the lower level of the pier with program, would give reason to inhabit the site. And, was designed to heighten the contrast between the active, lively, and highly articulated areas of the city, and the low, quiet space at the water’s edge.

The main programmatic element is the theater at the edge of the pier. It is an open-air theater, and so designed for use only through the summer season. The buildings on the lower deck of the pier are arranged as separate elements. Circulation between the different structures is across the open floor of the lower deck of the pier. Therefore, the entire complex has the feel of a waterside village.

There is a quasi-private area of the lower pier where the different performance companies work on the production aspects of the theater. There is also the public portion of the lower deck where people may eat at an outdoor snack bar, or in a more formal café and bar. There is a large rehearsal hall for use by the performance troupes. This structure will also serve as a space for public film screenings.

A tower is introduced in an area at about the halfway point along the southern edge of the pier. It pierces and connects the two planar elements, as it brings light to the lower deck. Additionally, the tower has a third deck which rises above the piers and provides a look-out point.
DRAWINGS AND MODELS
ARTIFACT ANALYSIS:
PIER CONSTRUCTION
ARTIFACT ANALYSIS:
WALL FRAGMENT, PORTAL SEGMENT
ARTIFACT ANALYSIS:
WALL FRAGMENT, END SEGMENT
ARTIFACT ANALYSIS:
WALL FRAGMENT, TYPICAL CENTRAL SEGMENT
SITE PLAN SHOWING PLAN OF UPPER DECK OF PIER
EASTERN ELEVATION OF SITE
PLAN OF GROUND LEVEL DECK OF PIER

1. STUDIO
2. STAGE BARGE
3. REHEARSAL HALL
4. STAIR TOWER
5. CAFÉ AND BAR
6. REST ROOM
7. OFFICE
8. BOOKSTORE
9. DRESSING ROOM
10. STAGE
PLAN, SECTION, AND ELEVATION OF STUDIO AREA
PLAN, SECTION, AND ELEVATION OF STAGE
CONCEPT MODEL
SITE MODEL
MODEL OF PIER
MODEL OF PIER
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LIST OF ILLUSTRATIONS

i. Theatre of Marcellus, Rome, dedicated in 11 BC. Palace Savelli by Baldassare Peruzzi, fifteenth century. (Passavanti)

ii. 

iii. Burnt Pier, Hudson River near Penn Yards, New York City. (Passavanti)


v. Lapine. Design for stage set for Sunday in the Park With George, production by Playwritte Horizons, New York City. Plate one. (Franer)


xxii. View of Pier 54, Hudson River, New York City, 1993. (Passavanti)

xxiii. Ibid.

xxiv. Ibid.

xxv. Portion of Stony Creek Granite headhouse facade, Pier 54, New York City, 1993. (Passavanti)