PRESERVING AMBIGUITY: RECONSTRUCTING THE FLOATING CHURCH OF THE REDEEMER

Ruth Marie Embry

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________________________
Advisor
Fon Wang
Lecturer in Historic Preservation

________________________
Program Chair
Randall F. Mason
Associate Professor
To My Parents
and Becker.
THANK YOU.

Fon Wang

Randall Mason
The Independence Seaport Museum
The Seamen’s Church Institute

Penn HSPV Class of 2014
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ARCHITECTURAL RECONSTRUCTIONS

When historic buildings are destroyed through damage or neglect, or archaeological remains of a previously lost building are found, there are several accepted approaches to their preservation. The site may be conserved as it is found, protecting all existing material and information for future research and interpretation. The site may be interpreted as a ruin or archaeological site, with the extant fabric displayed in a manner that both protects it and presents it to the public. Or, the building may be reconstructed using physical evidence, research, and conjecture. Of these approaches reconstruction is the most controversial. Reconstruction is the rebuilding of a building or structure that is no longer extant through research and conjecture. The new structure is usually built for the sole purpose of presenting a pseudo-authentic physical form of the lost building to the public. A rebuilt historic structure inherently has many issues due to the conditions and evidence upon which it was based, which in turn have resulted in differing opinions as to whether reconstruction should even be used as a method of preservation and education, or if it is destructive and misleading.

A reconstruction’s relative degree of success is dependent not only on the physical construct, but also the original intent and motives for the project. Often, these motives are educational, political, or social and it is from these standpoints that reconstruction has most thoroughly been discussed and evaluated. Yet, reconstructions are architectural undertakings; they are dependent on the establishment of a feasible construct through the design and interpretation of available information by an architect. Architecture, in both its technical and theoretical manifestations, is central to the success of any reconstruction and has the strongest impact on the effect the new construct will have on future interpretation.

Despite the significance of architecture, reconstructions are rarely examined
from the design perspective. Preservation professionals and critics focus their writings on the educational and cultural heritage implications of the new building and assess its successes and failures without mention of the design decisions that characterize them. Architects write extensively about designing new buildings for historic environments and the use of historic forms in new designs, but rarely consider the implications and possibilities of reconstructing historic buildings.

This thesis examines this discrepancy. Through discourse and a proposal for the reconstruction of the Floating Church of the Redeemer, reconstruction will be addressed through architectural theory and practice rather than education and heritage. There is a need for evaluation through an architectural lens because it is through this same lens that the new constructs are manifested and interpreted. This thesis proposes several architectural approaches to reconstruction to initiate a discussion that needs to be undertaken by architects and theoreticians that have addressed historic environments and contemporary design. Reconstruction is often seen as a lesser design typology, but it is as equally significant and influential as other constructs in historic environments and requires the same depth of research and discussion.

Despite the lack of literature pertaining directly to architecture and reconstruction design, architects and philosophers have established theories that will be reassessed and applied to reconstruction. Jean Baudrillard’s concept of simulacra expresses the inherent issues with reconstructions and their reception by the public, as does Peter Eisenman’s idea of presentness. Robert Venturi developed theories of ambiguity and the both-and for new construction, which may be applied to reconstructions. The proposal for the Floating Church of the Redeemer evaluates these theories and applies them to the design proposal.
RECONSTRUCTION AS PRESERVATION PRACTICE

The United States adopted reconstruction as a national preservation practice with the advent of historic sites being included into the National Park system. Horace M. Albright, during his term as director of the National Park Service from 1929 to 1933, worked to make historic places an important component of the park system.1 Jamestown, Yorktown, and George Washington’s birthplace were among the first sites to be added, and were quickly followed by the transfer of all battlefields and forts held by the War Department to the National Park Service.2 Unlike natural parks held by the National Park Service, historic sites required interpretation and explanation to attract and retain visitors. The physical beauty and possibility for physical activity independent of an scholastic understanding of the site was not applicable to the newly created historic parks. This new need for interpretation of sites led to new park service policies and projects to condense each site into a comprehensive whole, and if possible to illustrate and dramatize it to create interest and make lasting impressions.3

Interpretation was set into National Park Service policy through the Historic Sites Act of 1935, which gave the Park Service the authority to “restore, reconstruct, rehabilitate, preserve, and maintain historic or prehistoric sites, buildings, objects, and properties of national historical or archaeological significance and where deemed desirable establish and maintain museums in connection therewith.”4 Once given the authority to interpret through reconstruction, the Park Service began rebuilding lost buildings of “national significance.” George Washington’s Birthplace was one of the first buildings rebuilt. The reconstruction was began with little documentation or evidence

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2 Ibid.
3 Ibid, 52.
as to the original location or appearance of the building, and what information did exist was not completely followed. The house was built on what was later determined to be the wrong site and in a much more grandiose manner than the original cabin would have been.5

Because the “memorial mansion” was considered a large failure, Park Service officials began lobbying for more restrictive policies and approaches towards interpretation and reconstruction. However, there was little consensus on what these policies should include. Chief Historian, Verne E. Chatelain argued against reconstruction at sites where there was little physical evidence remaining, such as Jamestown. He worried that reconstructing a specific moment in time would negate and erase all other eras in a site’s history. Alternately, Fiske Kimball advocated for reconstruction of all destroyed buildings for more interesting historic sites.6 In 1937, the Park Service drafted a new policy, which stated, “better preserve than repair, better repair than restore, better restore than construct.”7 But because each of the options was determined by individual site values, reconstruction was still often a viable option and open to argument and interpretation.

The National Parks Service continued to reconstruct historic structures for interpretive purposes through the mid-1960s without further alterations to its policies. Until, in 1968, the Administrative Policies for Historical Areas of the National Park Service was published and limited reconstruction through more stringent preexisting conditions. These conditions included: the loss of almost all original fabric; the need for reconstruction as essential to public understanding; sufficient historic, archaeological, and architectural data; and the new structure should be built at its original site or a comparable one.8 Later policies and statements by the National Park Service changed

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5 Ibid, 66.
6 Mackintosh, Barry, “To Reconstruct or Not to Reconstruct: An Overview of NPS Policy and Practice,” CRM No 1 (1990), 5.
7 Mackintosh, Policy and Practice, 67.
8 Mackintosh, To reconstruct or not to reconstruct, 7.
stances on reconstruction slightly, but the core principles of sufficient information, original site, and interpretive need were maintained. These policies continue to be the basis for national reconstruction efforts today.

Internationally, the International Council on Monuments and Sites (ICOMOS) drafted and issued the Venice Charter in 1964, which took a stronger stance against reconstruction stating, “all reconstruction work should however be ruled out. Only anastylosis, that is to say, the reassembling of existing but dismembered parts, can be permitted.”\(^9\) This attitude towards reconstruction was more stringent than any policy issued by the National Park Service, and while not directly associated with any historic site, the Venice Charter was and still remains an influential document for preservation professionals.

ICOMOS later issued the Burra Charter of Australia in 1979 and revised it in 1999. These guidelines were written for Australian heritage, but have been influential internationally. They include:

“Article 1.8. Reconstruction means returning a place to a known earlier state and is distinguished from restoration by the introduction of new material into the fabric.

Article 20. Reconstruction.

20.1. Reconstruction is appropriate only where a place is incomplete through damage or alteration, and only where there is sufficient evidence to reproduce an earlier state of the fabric. In rare cases, reconstruction may also be appropriate as part of a use or practice that retains cultural significance of the place.

20.2. Reconstruction should be identifiable on close inspection or through additional interpretation.”\(^10\)

Although there have been many different, and dissonant policies written regarding reconstruction both within the United States and internationally, the same

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central idea continues through all of them: reconstruction should be only be considered when all other preservation options have been evaluated and there is sufficient information to reconstruct with a confident level of accuracy.

TO RECONSTRUCT

Despite policies and guidelines set to regulate and hinder reconstructions, they continue to be built to fulfill a variety of motives and assumed necessities. The most predominant motives include: education, tourism, research, and cultural symbolism. Along with other site specific rationales for reconstruction, each of these motives bring with it unique forces that effect the approach, design, and interpretation of the rebuilt structure.

One of the strongest arguments for reconstruction, especially within the United States and the National Park Service, is for educational purposes. In order to teach visitors, who predominantly represent the general public rather than educated preservation professionals, reconstructions allow for a more complete and comprehensible picture of history. For visitors, “seeing history is a less self-conscious process than reading.”11 By being immersed in what can be believed as the conditions of another time, the public gains a greater understanding and appreciation for a sites history than is possible looking at an archaeological site or reading interpretive signage. The visual impact of a complete reconstruction is paramount in the educational potential of rebuilt structures according to supporters of reconstruction.12

The incorporation of living history, workshops, and other interactive elements at reconstructions, such as Colonial Williamsburg, increases the educational potential of the historic site. Through placing a structure into a larger context, visitors can better

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understand the significance of a site and establish relationships and connections between the past and present. “An ‘inspired guess’ at reconstruction overcomes the boundaries of language and has the potential to communicate more effectively.”

Associated with the educational value of historic sites and their reconstructed buildings is tourism. An increase in the number of visitors to a historic site can have significant impacts on the economic development of both the site and the surrounding area. The desire for economic growth can often outweigh the motives of education or preservation and become the driving force for reconstructions. These tourism based reconstructions focus on becoming entertainment destinations as well as cultural resources.

However, tourism can be detrimental to historic sites because of the increased number of visitors. If not outfitted with the necessary infrastructure to handle large crowds of people, sites and their resources can be damaged or lost. Often to protect the site and accommodate even larger numbers, site will create reconstructions at alternate locations that are more accessible and do not effect the original historic fabric. For example, the cave paintings of Lascaux, although not lost, have been replicated at a separate location for protection of the originals and to meet the demands of tourism.

Some reconstructions are not focused on the completed end result, but rather the process of reconstruction and the information that can be attained from it. The process of researching and rebuilding a historic structure provides insight and experience for preservation professionals that is not possible through the examination of an extant structure. By using the materials and methods of an historic period, professionals can better understand the construction and design process and apply it to other resources.

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13 Ibid.
15 Blockley, 19.
16 Stanley-Price, 36.
The reconstructed building may also be used for specialized research rather than education of the general public. The Globe Theatre in London is one such structure. For the architects and preservationists working on the theatre, the main goal was to recreate a space that embodied the same qualities affecting the production and execution of Shakespeare’s plays when originally performed. The finishes, construction, and physicality of the structure were secondary to the light, acoustic, and spatial qualities. Upon completion of construction, the theatre’s function as a living document for research of the nature of Shakespearean theatre could fully commence, and it is from this standpoint that the success of the reconstruction is evaluated.

The final argument for reconstruction that will be discussed is cultural symbolism. Often, a historic site is significant to a specific culture or nation, which provides the impetus for the reconstructions. Rebuilding such a site becomes an issue of patriotism and cultural preservation. The reconstructed structures embody a set of beliefs and traditions held by the culture and are therefore important as symbols of the prosperity and influence it has.

The need for these symbols can be motivated by a need for propaganda and legitimization of a society’s values, such as German National Socialists’ creation of open air museums such as the bronze age site at Unteruhldingen, which sough to propagandize German nationalism through connections with historic Germanic events and peoples, or the reconstructions can be less radical and embody a sense of national pride and history, such as the Governors’ Palace at Colonial Williamsburg. This is not to say that the later motivation does not have propagandist or political undertones, but these undertones are less about enforcing a system of beliefs on a culture and more about promoting and celebrating the believed successes of the associated society.

18 Ibid, 121.
19 Blockley, 18.
20 Ibid.
TO NOT RECONSTRUCT

Despite the many compelling arguments for reconstruction, there are many reasons for avoiding them. Most of the arguments for reconstruction deal with goals and needs outside of the physical construct of the historic structure. The actual design and construction of the building is not part of the arguments. In contrast, the rationales against reconstruction of historic sites deal primarily with the structure itself rather than philosophical motivations. The main arguments against reconstruction include: the difficulty in achieving authenticity, the ethics of misrepresenting information, the loss or damage to original fabric, distorted interpretations of the site, and cost.

Despite the significant amount of research and documentation that may be available for a given site, it is impossible to create an authentic historic building. Authenticity requires something to be not only accurate, but also the genuine original. A reconstruction, no matter how accurate, will never be genuine, but rather an interpretation of the original.

If authenticity is viewed in broader terms as only physically accurate and not original, reconstructions still will rarely fully meet the conditions. Complete documentation of a lost historic building rarely exists. Even if the original architectural construction drawings are available, they cannot provide information about alterations to the building both intentional and natural, nor can they provide all of the necessary information about construction techniques and materials. Construction methodologies and materials have changed significantly over time and much of the information about previous techniques has been lost or is infeasible using contemporary craftsmen. Material and construction precision is equally important as spatial organization and detailing for an accurate reconstruction.

Authenticity is also impossible because of the change in the cultural atmosphere
since the time of the original construction. The Zeitgeist of a historic building cannot be recreated and instead, the contemporary culture will be instilled into the reconstruction. The original Zeitgeist is apparent in extant historic buildings through the accumulation of time in the fabric as well as intangible qualities that cannot be recreated or defined. The accumulation of time is in itself not necessarily a marker of a specific cultural atmosphere, but helps a visitor to understand the disconnect between the site and contemporary conditions.

Just as a historic building has elements and conditions that are inherent to its time of construction, so does a reconstruction. These elements affect its authenticity by deviating from the original. People intrinsically want to improve upon things when they redo or replace something. The nostalgic view they have of the past is almost always better than it would have actually been, and therefore these biases will be portrayed in a reconstruction. To detach oneself and one’s biases entirely from a reconstruction is impossible because one cannot be aware of them all. Contemporary tastes and opinions can also sway the design for a reconstruction, such as many of the rebuilt buildings at Colonial Williamsburg, which were heavily influenced by the Beaux-Arts tradition that was prevalent in contemporary architecture at the time.21

These improvements and biases, when incorporated into a reconstruction, then become fact to visitors. They become a simulacrum of the original, not an interpretation in the minds of tourists, students, and perhaps even professionals. This occurrence leads to ethical questions about reconstruction. Charters and policies attempt to curb the creation of simulacra through signage and other interpretive measures that distinguish reconstructions from originals, but most these measures do little to dissuade the visitors. Barry Mackintosh, former Chief Historian for the National Park Service, describes the issue of interpretive signage and states, “the subtlety of

qualifying something as ‘traditional’ is often lost on audiences.”

It is the responsibility of preservation professionals to ensure the accurate and appropriate dissemination of information about historic sites, especially when the site has been reconstructed and one must question the need and efficacy of a reconstruction if the end result alters the perception of its history for current and future generations.

In-situ reconstruction is the most common practice because it assures the building is interpreted in its context accurately, but this practice can lead to the loss or damage of existing archaeological remains. Construction is a physical process and requires the alteration of the surrounding site. These changes cause disruption to the ground in and around the building location and therefore the loss of the archaeological material beneath it. Even if thorough archaeological investigations are completed prior to the reconstruction, the best practice is to maintain the existing conditions of the site and cover exposed excavations once the research is complete for future generations to study. To build upon archaeological evidence will destroy the evidence for future research. Building upon existing foundations or other building remains is also detrimental. Despite steps taken to make all reconstruction actions reversible, it is often impossible to return a site to an unaltered pre-reconstruction state. “The horizontal displacement of any reconstruction work to another site as ‘experimental archaeology’ avoids this problem, as does ‘vertical displacement’ to some extent – I refer to the practice in Japan of leaving a layer of earth or concrete to separate the original subsurface remains from the foundation of the reconstruction.”

Separate from the accuracy and interpretation of the reconstructed structure, is the interpretation of the site. Reconstruction of one building or element within a site can place unrealistic significance on the structure, which may be only a part in a larger scheme. This discrepancy can cause visitors to misunderstand the site as a whole, and

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23 Stanley-Price, 39.
can also affect a visitor’s circulation through the site, further altering their perceptions of the landscape.\textsuperscript{24}

Reconstruction of a single element from a certain period also alters a visitor’s understanding. By only recreating a single moment or era in a site’s past, the emphasis will be shifted towards that moment and away from other periods that may have equal or greater importance. For example, all buildings built after the Classical era on the Acropolis of Athens have been removed, thus shifting the focus entirely on the Ancient Greeks and disregarding all history associated with the Acropolis thereafter.\textsuperscript{25} While the Classical era is inarguably the most significant period, many other important events and cultures have used and changed the Acropolis. This selective approach to history must be carefully considered for reconstructions.

The final argument against reconstruction is that of cost. Rebuilding a historic building is a large financial undertaking. Not only are there the costs associated with the physical reconstruction, but also the documentation of the existing remains, research into the original structures appearance and construction, and the design of the reconstruction must all be completed and financed prior to construction.\textsuperscript{26} Independent of all other arguments for or against reconstruction, cost can often be a deciding factor and often times will stop a reconstruction unless a wealthy benefactor, such as J. D. Rockefeller for Colonial Williamsburg, or a national or government institution, such as the National Park Service, can finance the project.

Cost also affects the outcome of the reconstructions through a project’s ability to find support and financing. If there is strong community or political support for a project, it is more likely to raise the required funds for the reconstruction. These supported projects may not be the most deserving and significant sites that professionals and

\textsuperscript{24} Ibid.
\textsuperscript{25} Ibid, 40.
academics would chose as candidates for reconstruction, but because of the financial support they will be rebuilt first.27

Reconstruction continues to be a controversial methodology in preservation. Its reception is dependent on values and motives associated with each individual historic site as well as the opinions of whomever is the influential preservation voice at that moment. With these variables constantly shifting, a consensus on reconstruction practice and policy is impractical. Therefore, it is the responsibility of the professionals associated with every potential reconstruction site to assess all implications and determine what is best for both the present and the future of the site.

27 Stanley-Price, 41.
Figure 01 - George Washington’s Birthplace. Image Courtesy of the National Park Service.

Figure 02 - Reconstruction of Lascaux. Image Courtesy of Sciences et Avenir.
Figure 03 - The Globe Theatre.
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Figure 04 - Unteruhldingen.
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Figure 05 - The Governor’s Mansion, Colonial Williamsburg.
Image Courtesy of Colonial Williamsburg.

Figure 06 - Acropolis.
Image Courtesy of UNESCO.
THE NEED FOR ARCHITECTURAL DISCOURSE

Reconstructions, despite the arguments against them, continue to be a viable form of historic preservation. They are the culmination of research by historians, archaeologists, and preservation professionals then interpreted as a physical structure. Architects are the link between the academic research and the physical realization. They produce the object that the public will likely understand as truth as the genuine historic structure. Reconstructing a historic building is a process of design rather than recreation, but the documentation for a site is never sufficient to build the structure without conjecture and completing incomplete information. Through completing missing information, clarifying given data, and addressing a contemporary site’s needs for interpretive elements and modern code requirements, architects are designing a new structure that is referential of a historic building. However, the public likely will read the reconstruction as an authentic historic building. Therefore it is the responsibility of the architect to address this discrepancy through interpretation and design.

Yet, architects have not taken up this responsibility as one that requires discussion and examination. Unlike countless other architectural typologies, there are limited writings and theories to guide them. Architectural treatises and theory are the basis for architectural design, and the contemporary ideologies of architectural form, function, materiality, and meaning, permeate design and construction through both conscious action and subconscious diffusion. These influential factors also impact the perception of architecture by the public. In order to responsibly and intelligently address the problems of reconstruction, architects must have the discussion necessary to guide the design ideologies and processes. As with any aspect of architecture, there are no definitive answers to the questions of reconstruction, but the discussion and application of theories presented by this thesis provide a stronger basis for architects
to approach these problems.

Though the guiding design philosophies and principles for reconstructions are limited, architects often have criticisms of completed reconstructions. Ada Louise Huxtable wrote extensively on the failures of reconstructions, stating, “The copy corrupts the original because it has eliminated the sensibility triggered in part by the miracle of survival and the messages the object brings from the past.”1 The replacement building is abridged and void of its original subtleties because of the lack of knowledge and understanding of the original. Huxtable also states, “to imply equal value [to a copy] is to deny the act of creation within its own time frame, to cancel out the original mind, hand, material, and eye.”2 This concept of a structure as a reflection of its own time and creator is central to much of the criticism of reconstructions by architects. The loss of the Zeitgeist is central to the issues of rebuilt buildings.

For recent reconstruction projects, such as The President’s House on Independence Mall in Philadelphia, Pennsylvania, criticism questions the necessity of reconstructing the building. Instead arguments are made for the presentation of the available existing material, such as archaeological evidence. According to Inga Saffron, architectural critic for the Philadelphia Inquirer, “if your aim is to preserve history’s memory, nothing beats being about to see the real thing.”3 Saffron advocates for the presentation of existing, original material rather than a reconstruction. Yet, there is not always a “real thing” to be seen and therefore reconstruction remains a viable method of preservation and presenting a site’s history to the public.

It is necessary for the disconnect between an architect’s reconstruction design work and the subsequent criticism to be addressed. Theory and attitudes must be

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2  Huxtable, Unreal, 35.
addressed prior to the re-creation of a historic site, at both the site specific and holistic perspectives. As with all architectural typologies, there cannot – nor should not - be a definitive answer to reconstruction. The circumstances of each project provide different parameters and require a distinctive approach. However, certain views and attitudes can be established to guide the designs. Although nothing has directly been written about the architectural implications of reconstruction design, other architectural theories can be applied and can serve as a basis from which discussion can develop. The following discussion addresses several of these theories and their applicability to reconstruction. Simulacra and presentness provide a foundation for the perception of reconstructions, and ambiguity begins to address methodologies of approaching the design of a reconstruction. These topics are not all encompassing, but serve as a basis for further investigation and academic progress.

SIMULACRA AND THE AMERICAN REALITY

Umberto Eco in Travels in HyperReality states, “if a reconstruction is to be credible, it must be absolutely iconic, a perfect likeness, a ‘real’ copy of the reality being represented.” Yet, he observes a need for fulfillment of Americans’ imagination in all aspects of life, achieved through the creation of a new reality that has absorbed and simulated the original, whether it is in history, art, or everyday life. The new-reality, or hyperreality, is perfected, improved, and sanitized to make an image more palatable to the public. The reproduction then becomes the new original, or simulacrum, and the original-original is no longer needed. But for the reproduction to be created the original must first be idolized; there must be a preexisting idea of the significance of the original to serve as the driving force for the reconstruction. This idea often is rooted in nostalgia and creates a warped view of the original that that supports the translation into the simulacrum.

As elaborated by Jean Baudrillard in *Simulacra and Simulation*, a simulacrum is a copy of an original thing that becomes the original through the public’s shifting perception of the original and its significance. The simulacrum replaces the original and in doing so creates a hyperreality. He positions simulacra within contemporary culture and entertainment, but it is equally applicable to preservation efforts. Reconstructions are attempts to recreate something that at one time existed - the original - and the reconstruction is made to function as an authentic copy of this original. When the reconstruction is then interpreted as the real historic document by the public as is commonly the case, it becomes a simulacrum. The absolute unreality is offered as real presence with the intention of minimizing traces of the act of replication and replacement.

In addition, nostalgia causes the past to be viewed as better than the present. The positive, beautiful aspects of the past are emphasized, while the imperfections and negative moments are suppressed or reinvented. “Through the filter of nostalgia we change the past and in doing so, we seek to change the present.” When history is reconstructed, either through architecture or entertainment means such as movies, it is filtered by nostalgia. The simulacrum is reinvented to suit the ideas and desires of contemporary culture, yet is believed to be an authentic replication of the past. For Baudrillard, it is this filter that causes the copy to become the reality. It is the image that is preferred; it is the idolized version of the original that removes all elements that are uncomfortable or imperfect. Huxtable describes “the American state of mind, in which illusion is preferred over reality to the point where replica is accepted as genuine and the simulacrum replaces the source.” She attributes this mindset in part to Americans’ inability and unwillingness to understand the unfamiliar, which

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6 Eco, travels, 7.
8 Huxtable, Unreal, 2.
therefore leads to reinterpretation of the past in a manner amenable to contemporary American sensibilities and expectations.

This reinvention of reality through selective filters has resulted in the proliferation of American themed entertainment, and nowhere is this trend more apparent than Colonial Williamsburg. Through selective presentation of the physical and social elements of Williamsburg “one could learn a little romanticized history, confuse the real and the unreal, and have – then and now- a very nice time.” Through attempting to return Williamsburg to a specific cutoff date, preservationists have destroyed any traces of the history that came after 1770. This detachment of the site with the contemporary time period places Williamsburg in the realm of hyperreality with the recreated colonial town believed by visitors to be an authentic depiction of the original. As Eco observes, “for historical information to be absorbed, it has to assume the aspect of reincarnation...absolute unreality is offered as real presence...the ‘completely real’ becomes identified with the ‘completely fake.’”

The reinvention of aspects of history and contemporary culture is not limited to historic sites such as Colonial Williamsburg. To Huxtable and Eco, the success and proliferation of theme parks such as Disney World is based on the same principles and motives. The recreated “Main Street USA” or the replicated world cultures in Epcot’s “World Showcase” aim for the same hyperreal experience as Colonial Williamsburg. The imitated locations are reinvented and distorted to better fit what Americans want to see and believe. Yet, there is a significant difference between Disney World and Colonial Williamsburg. Disney World is visited as a place to entertain, with suspended expectations of education or truth. Reality is deferred with the intent of immersion into hyperreality. Williamsburg is approached as authentic. Visitors believe what is presented to them to be true. The entertainment element of Williamsburg is a

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9  Huxtable, Unreal, 15.
10  Eco, travels, 7.
successful marketing strategy for attracting and maintaining visitors. But once present, these same visitors absorb the simulacra of the colonial setting as absolute fact - not entertainment - and not as a selective depiction of an entire society.

How then does preservation avoid the creation of simulacra when presenting historic resources to the public? Reconstructions attempt to replicate something, and to accurately portray the missing information as the original. Yet, it is impossible to create an authentic reconstruction and therefore any reconstruction attempting to do so will be a misrepresentation. To be authentic, something must be an original; it must be a genuine artifact. To recreate something takes away the originality. “To imply equal value [to the original and the replica] is to deny the act of creation within its own time frame, to cancel out the generative forces of its cultural context.”

It is through design that the issue of authenticity, reality, and the public’s perception can be addressed. The presentation and execution of a reconstruction is the main defining element that determines if the public will accept the replica as truth or interpretation. It is critical for a reconstruction to not become a simulacrum. It should provide the public with a better understanding of a historic resource than would be possible through archaeological remains, yet should not attempt to become the original. This distinction is significant both for the education of visitors and for future academics and researchers. Through creating a construct that is incomplete, ambiguous, or differentiated from the original is some manner, future research and interpretation can be made, rather than having an ‘accurate’ reconstruction to hinder future perceptions.

PRESENTNESS AND THE BEING-ONLY-ONCE

Peter Eisenman defines presentness as “to loosen the inexorable relationship of the architectural object from its thought to be natural condition of instrumentality,”

11 Huxtable, unreal, 18.
which differs from the more common idea of presentness, or Zeitgeist, as the sense of the current moment within history. Eisenman’s definition implies there is something specific about an architectural object that gives it a sense of presentness that is separate from its chronology. Therefore there are multiple forms of presentness, such as presentness of new, implying an element of innovation in the architecture, or presentness of dislocation of type, where the typology of the architecture is reinvented or separated from the traditional and expected. Both of these examples imply a deviation from the norm within a building that has presentness. The deviation, the instance of origination and individualism, imbues the building with presentness, which is entirely separate from the existence of the building within time.

A building loses its presentness when its individuality is absorbed into architecture as normalcy. Eisenman uses the Laurentian Library as an example of this change. The Laurentian Library has presentness because it is a rejection of traditional library typologies and introduces a new paradigm for what a library can be. The Library maintains that sense of presentness today because the ideas put forth by Michelangelo have not been integrated into conventional design methodologies. Conversely, for Eisenman, the Barcelona Pavilion no longer maintains its presentness because the reconstruction negated the presentness of the original by negating its being-only-once. Buildings also lose their presentness over time; as a building loses relevancy in contemporary culture either through inefficiency or replacement of typology its sense of presentness diminishes.

Closely tied to presentness, being-only-once, as developed by Jacques Derrida in The Truth in Painting, is the essence of the original in all, unique works of art.

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13 Eisenman, Presentness, 141.
Once the artwork is replicated, the being-only-once is lost. This essence is attributed to the quality of discovery and origination in the initial work of art. Once the work is replicated, it can be improved upon or manipulated with the knowledge gained in the original’s creation. These duplicates then are valued less because of this alteration. It is the desire for being-only-once that drives architecture according to Eisenman. Through constant efforts of create the sense of being only once in buildings, architects continue to instill presentness in their buildings and continuously sustain and develop the practice of architecture.16

To reconstruct a building is to move away from presentness, innovation, and being-only-once. Not all historic buildings have a sense of presentness today, nor did they when they were constructed. Yet, they maintain their significance through history and public opinion. Eisenman maintains, like with the Barcelona Pavilion, “there’s no sense in rebuilding [them] today...they might have an enormous sense of history but in a very different sense than presentness.”17 Eisenman compared the reconstructed pavilion to Disney World. He stated, “I believe that it belongs in history and when it was built I’m certain that it had incredible presentness. There’s no sense rebuilding it today...to recreate the Barcelona Pavilion, to have someone look at it and see within it the spirit of 1929 or what it signified at that time, is an impossibility.”18 Eisenman argues that buildings of the past can only be relevant today if they never had presentness and instead are timeless, and it is by these two metrics that buildings should be measured.19

Presentness provides relevancy to contemporary architecture through the embodiment of innovative and relevant applications. Preservation of extant structures provides relevancy through the connection of the past with the present. Architects and preservationists must determine where reconstructions fall in this spectrum.

16 Eisenman, Presentness, 136.
17 Papadakis, Reconstruction, 15.
18 Ibid., 15, 17.
19 Ibid., 17.
As new constructs, reconstructions should have a sense of presentness to validate their existence, yet their rationale for execution is based in their history and not any contemporary innovation. Reconstructions can serve as excellent interpretive and educational tools for the public and therefore the lack of presentness should not discontinue their implementation as Eisenman would argue, but the design of the reconstruction should be conscious of this discrepancy.

A reconstruction negates a building’s being-only-once through its replication. Like the issue of simulacra, the loss of the sense of being-only-once and the alteration inherent to replications should be central to reconstruction theory. Commonly the argument for the reconstruction of a structure is the significance of the original. This significance is tied to the uniqueness of the building as an original, but this significance is then lost if rebuilt. The question then becomes what is the significance if the reconstruction of the original importance is lost through the act of reconstruction, and what is the function of architectural design in addressing and implementing this new significance.

ARCHITECTURAL AMBIGUITY

Ambiguity is the ability to express or represent more than one idea within a single element. The ambiguous element is then open to multiple interpretations and resists absolute definition. Robert Venturi describes Ambiguity in *Complexity and Contradiction in Architecture* as “the paradox inherent in perception and the very process of meaning in art: the complexity and contradiction that results from the juxtaposition of what an image is and what it seems.”

In architecture the ambiguity Venturi speaks of is embedded in the conflicting relationships of architectural form and elements: form and structure, concrete and abstract. Through ambiguity, architecture gains

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richness of meaning and creates poetic impact through tension. Venturi’s concept of “Both-And” allows for inclusive ambiguity in which multiple meanings are integrated into architecture rather than excluded through “either-or.” Through the layering of meanings and elements, a building becomes more complex and is open to greater latitude of interpretation.

Venturi talks of ambiguity and both-and in relation to original works of architecture and their relative degrees of success at multiple interpretations and layering of ideas, but concept is equally applicable to reconstructions. Rarely is there full documentation of the structure, and even if documentation exists, it is impossible to have enough to fully understand a lost historic building, and the social and ephemeral elements of the structure will always be lacking. The reconstruction therefore is inevitably designed based on conjecture and knowledge of similar structures from the time period. If this methodology is used to construct an ‘exact’ replica of the building, the result will prove inaccurate and leave little room for further research and future reinterpretation. By integrating ambiguity into a reconstruction, the structure will be left open for interpretation by the public and professionals. The information presented to the public will read less as a simulacrum and avoid the misrepresentation of the past. Through using both-and instead of either-or, multiple conjectures and interpretations of the original structure can be integrated into reconstruction to allow the building to be read in multiple ways.

It becomes the charge of the architect to integrate ambiguity into the reconstruction while still portraying the necessary information for a successful interpretive and educational construct. Ambiguity does not necessarily require the abstraction of a historic structure so that it no longer resembles the original as Venturi did at Franklin Court, but it does necessitate the available information and the means

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21 Ibid., 22.
22 Ibid., 23.
of representation to be questioned and addressed in a more theoretical manner than traditional methodologies require.

THE NEED FOR FURTHER RESEARCH

These concepts only begin to address the questions and possibilities of reconstruction design. Further discussion and research by architects and preservation professionals is needed to fully understand the implications of reconstructions and their architecture. As a design typology, they provide challenging parameters, but with the possibility of extreme innovation and architectural expression. It is also necessary to test developed theories through physical design and construction. Architecture and reconstruction are processes ending with physical constructs for the public to experience. While theoretical discussions and investigations are a significant part of the process and crucial to a better understanding of reconstructions, it is the realization of these ideas as a representation of the lost structure that is the end goal.

The following design proposal for the reconstruction of the Floating Church of the Redeemer applies the concepts of simulacra, presentness, and ambiguity to the physicality of reconstruction practice. Through application the thresholds between simulacrum and new, presentness and derivativeness, ambiguity and concreteness will be investigated. These thresholds are different for every reconstruction, just as the arguments, needs, and motivations are, but the fundamental rationales and applications are applicable to all projects.
Figure 07 - The Presidents’ House.
Image Courtesy of Kelly|Maiello Architects.

Figure 08 - Colonial Williamsburg.
Image Courtesy of Colonial Williamsburg.
Figure 09 - Main Street USA, Disney World.
Image Courtesy of Disney World.

Figure 10 - Laurentian Library.
Image Courtesy of Encyclopedia Britannica.
Figure 11 - Barcelona Pavillion.
Image Courtesy of Author.

Figure 12 - Franklin Court.
Image Courtesy of the National Park Service.
CASE STUDIES

Through three case studies, the successes and failures of three differing approaches to reconstruction will be evaluated with the theoretical concepts previously discussed applied. The Capitol at Colonial Williamsburg is a traditional reconstruction that attempts to create an authentic depiction of the original structure, but was susceptible to contemporary stylistic influences and interpretive errors. Franklin Court is an extreme deviation from traditional reconstructions, but in doing so becomes its own structure with its own significance, questioning its success as an interpretive site. And finally, the golf club at Krefeld is a full-scale architectural model that addresses the incompleteness and vagueness of existing documentation through its distinction as model rather than architecture.

THE CAPITOL, COLONIAL WILLIAMSBURG

One of the largest and most influential reconstruction projects in the United States is Colonial Williamsburg. Funded by John D. Rockefeller, architects and preservation professionals attempted to return Williamsburg, Virginia to its colonial state. Because most of the structures had been lost or drastically altered, much of the preservation efforts focused on reconstruction, with the capitol building as the centerpiece of the project. The capitol existed in two separate building phases. The first, built in 1705, was occupied by the colonial governors and burned in 1747.¹ The second capitol building was constructed in 1751 on the same footprint, but with alterations to the massing and overall appearance.² It was this building that the fathers of the American Revolution met and therefore represents the patriotism central to

² Lounsbury, Beaux-Arts, 374.
Rockefeller’s motivation for creating Colonial Williamsburg. This building was also lost during a fire in 1779.³

However, when the architecture firm of Perry, Shaw, and Hepburn were tasked with reconstructing the capitol building in 1920s and 1930s, they chose to recreate the first capitol because there was more information available and therefore they reasoned there would be less room for conjecture. The also found the plan and massing of the original building to be more architecturally interesting.⁴ Because of this decision the structure built to represent the capitol of colonial Williamsburg and to embody the patriotic ideals of the city is misleading and portrays a false sense of where the founding fathers began the Revolutionary War, despite being a central goal of the Colonial Williamsburg project.

At the time of the reconstruction, Beaux-Arts designs and philosophies were the driving style of architecture in the United States. The hierarchical arrangement of mass, symmetry, axial arrangement, and correlation of plan to elevation were pervasive in architectural thought. These ideas were often contradictory to colonial architecture and the evidence available for the lost buildings at Colonial Williamsburg, but the training and mentality of the architects often led to errors and revisions in the reconstructions both intentionally and not. This discrepancy can be seen clearly in the capitol building. Through applying refined Beaux-Arts principles to the less sophisticated design for the capitol, Perry, Shaw, and Hepburn altered the plan of the building, which in turn effected door placement, circulation, and massing.⁵ Through improvements made to make the building to better fit the Beaux-Arts ideals of the time, the reconstruction ignored existing archaeological evidence and did not match the building footprint upon which it was built.

Another issue with the capitol reconstruction, and many others at Colonial

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³ Lounsbury, Beau-Arts, 374.
⁴ Lounsbury, Beaux-Arts, 375.
⁵ Lounsbury, Beaux-Arts, 380.
Williamsburg and elsewhere, was the use of anachronistic precedents when determining the design and detailing of the reconstruction. Because of the applied historic significance, the best examples of colonial and Georgian architecture were used to generate the missing details for the capitol building without considering of the chronology of these examples. Many of the buildings used as precedents for the reconstruction design work were built after the completion of the original capitol building. Therefore, the information taken from these examples cannot be assumed accurate. As is common with ‘traditional’ reconstructions like Colonial Williamsburg, the architects also used the best building practices and materials available to recreate the capitol building. Much like the effect of nostalgia, the use of best practices improves the reconstructed building and erases any discrepancies or errors the original craftsmen may have made due to lack of knowledge or materials.

The capitol building at Colonial Williamsburg is an example of traditional reconstruction practices, and is not an isolated instance of contemporary stylistic influence and alteration. Through creating an idealized version of the structure, the architects took the believed symbol of American patriotism and created a simulacrum rooted in a new hyper-reality of colonial Virginia. Because of the extent of reconstructions at Colonial Williamsburg and the influential nature it has on the public, the simulacra’s perversion of colonial life and architecture as truth is further exaggerated.

FRANKLIN COURT

In 1976, the National Park Service commissioned Robert Venturi and Denise Scott Brown to design the reconstruction and accompanying museum for Benjamin Franklin’s house in Philadelphia, Pennsylvania. There were no extant images of the house, with insurance descriptions, archaeological evidence, and letters between Franklin and his wife as the only information available. This information gave the
overall plan and form of the structure, but did not provide sufficient detail to warrant complete reconstruction according to Venturi and Brown. The architects instead designed a “ghost house” with the probable silhouette of the house and carriage house outlined in steel. This approach avoided the creation of a structure based mainly on conjecture while still presenting an idea of the scale and form of the house.

Franklin Court is an excellent example of the ambiguity and contradiction that Venturi speaks of in *Complexity and Contradiction in Architecture*. The steel ghost frame is an inherently ambiguous approach to representing architecture. Through extreme abstraction, the structure reads as a gabled roof building approximately three stories tall, but leaves the details, materiality, and construction to the imagination. From the surroundings, surviving and reconstructed 18th Century buildings, the public can develop an idea of what Franklin’s house would have looked like, without the structure providing concrete answers to its appearance.

The structure is a contradiction of form and representation, a physical embodiment of Venturi’s both-and. As a thoroughly modern structure of welded steel with Pop Art and Post-Modern sensibilities, the reconstruction has no ties to the 18th Century building it represents. Yet, through the well-researched historic reference of massing, the presentation of archaeological evidence below the structure, and the iconographic representation of Franklin’s writings, the structure becomes a successful interpretive historic site. The juxtaposition of these two ideas adds depth to the site, while avoiding becoming a simulacrum. There is no question for visitors, no matter their knowledge of 18th Century architecture, that Franklin Court is not the original house inhabited by Benjamin Franklin.

The reconstruction also has its own sense of presentness through the innovation of reconstruction design. The presentness is separate from the significance of Benjamin Franklin and the original structure, which could be argued is detrimental to

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the site through making the focus on the contemporary design rather than the historic importance. Franklin Court is usually studied in architectural history as an example of Post-Modern architecture through its reinterpretation of traditional historic forms, rather than for being a reconstruction of Franklin's house. The extreme deviation from traditional reconstruction and architectural practices avoided many of the issues with traditional reconstruction practices, but in doing so also shifted the focus of the site. Future reconstructions need to find a medium between these two extremes to avoid falsely portraying the interpretation and turning the reconstruction into an unrelated art piece.

MIES 1:1

In the summer of 2013, Mies van der Rohe’s unbuilt golf club in Krefeld was constructed as a 1 to 1 model for a 3-month exhibition. Through using original drawings and documents, Robbrecht an Daam Architects and Christiane Lange presented visitors an estimation of the original 1930 design. The structure was conceived of as a model rather than a true building, which allowed for flexibility in the interpretation, while creating a visual separation from authenticity for visitors.

According to Rem Koolhaas, the pureness of a large model is not possible in small models or real buildings. Small models lack necessary detail and limit one’s ability to imagine the architectural subject as real, while actual buildings lose their purity in their completeness. A real building leaves nothing to the imagination as to what the building could become and is clouded by technical details and realism. A large model gives the sense of architectural space, while avoiding the completeness and dullness of a constructed building. Through creating a full-scale model instead of a projected realization of the Krefeld golf club, the project team maintained a sense of

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purity, yet gave the public a space to physically experience Mies’ unbuilt work.

Designing the golf club construct as a model rather than a building was a successful way to address the discrepancies and gaps in the available information in Mies’ design. For example, the drawings had no indication of materiality. Because the reconstruction was a model and not a building, the materials could be simulated through unconventional materials without the intention of realism. Mies is known for his lavish marble walls in buildings such as the Barcelona Pavilion and the Tugendhat House. It is assumed that similar wall treatments would have been used in the golf club, but the specifics of the materials do not exist. Therefore the model’s framed walls faced in plywood replace what would otherwise only be conjecture. The plywood is easily distinguishable as a model material and not an attempt at authenticity. The abstraction of materials was possible in part because of the temporality of the structure. Untreated, plywood cannot be used as a long-term exterior material, but for the short timespan of the exhibition it worked. Designing the reconstruction as a model also allowed for the unknown areas and elements of the building to be left unfinished or unbuilt. This approach gave the structure a under-construction or ruin-like feeling and helped to avoid the incorporation of false information into the reconstruction.8

The Mies 1:1 exhibition was an exercise in distilling the main architectural ideas and elements of Mies’ golf club rather than a replication of the design. This distinction is critical in the separation of the reconstruction from a simulacrum of the golf club. The project does not attempt to be the golf club, but rather all design decisions were made to avoid creating simulacra. The project has its own presence and sense of time, while presenting the past as the central focus. Through ambiguous materials and absent elements, the construct minimizes conjecture and successfully presents the available information to the public without attempting authenticity.

8 Lange, Mies.
Figure 13 - Reconstruction of the Capitol, Colonial Williamsburg. Image Courtesy of Carl Lounsbury.
Figure 14 - Franklin Court.
Image Courtesy of the National Park Service.
Figure 15 - Mies 1:1.
Image Courtesy of the Robbrecht an Daam Architects.
THE FLOATING CHURCH OF THE REDEEMER

On November 3, 1845, Reverend Mr. Suddards of Philadelphia visited New York City to meet with the Seamen’s’ Church Institute (SCI) of New York. There he saw the Floating Church of Our Saviour, the first floating chapel in the United States. In the mid-19th Century, organizations in major East Coast cites, such as the Seamen’s Church Institute began constructing floating chapels to minister to the dockworkers and sailors along their cities’ waterfronts, who they deemed did not attend the existing churches because of their locations being too removed from the waterfront, to allow them “to worship in [their] own element.” Through reinventing the churches as boats, they hoped the mariners would be more apt to attend services, and “no longer...need to look at the toll spires of New York’s numerous churches an exclaim: ‘No man cares for my soul!’” The floating churches by their nature were also transient and therefore could be moved along the waterfront to different locations most in need of spiritual guidance.

After returning to Philadelphia, Rev. Mr. Suddards and the Churchman’s Missionary Association for Seamen announced a competition in 1847 for the design of a floating chapel for the Delaware River. Among the entries were a design by architect John Carver for a modest carpenter gothic church atop a barge and a design by a New York marine architect, Clement L. Dennington. Dennington’s design featured a tall spire centered on the front facade of the church, with carpenter gothic detailing on the exterior and interior frescoes resembling brownstone by H. and O. Filolet of New York. Dennington’s design was selected and was built in a shipyard in Bordentown,

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2 Kverndal, Seamens.
New Jersey in 1848. According to a contemporary report,

“the building [was] firmly fastened on a substantial deck 38 feet by 90, with guards extending 8 feet outside around it, and resting on two boats of 80 tons each, placed ten feet apart, and strongly connected together. The church [seated] 500 persons, and [was] to have a fine-toned organ and bell. The top of the spire [was] 70 feet from the deck; and the edifice [was] 32 feet wide by 85 feet long, including the vestry.”

After construction, the church was pulled by tugboat to its permanent wharf at the base of Dock Street along Philadelphia’s Delaware River waterfront. On January 11, 1849, Reverend Alonzo Potter consecrated the Floating Church of the Redeemer. It was received by the public with great fanfare and prompted George Washington Doane to compose the hymn “Fling out the Banner! Let it Float.”

The Floating Church of the Redeemer remained moored at the based of Dock Street until the Churchmen’s Missionary Association was forced to sell the structure under pressures from the City of Philadelphia. The slip, which served as the church’s home since its consecration in 1849, was leased by the City of Philadelphia, who by 1852 wanted to rent the space for commercial purposes for increased income. The Churchmen’s Missionary Association unsuccessfully tried to fight the City Council’s decision stating,

“the present dock is unfit for proper commercial purposes... [and] there is no other dock adapted to the Floating Church from the present location to the Navy Yard, except at such a cost as a Mission to the Poor could not possibly sustain. For these reasons also, we solicit a continuation of the lease to the Mission, if it has accomplished an good to the community.”

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6 CMA History File, 1947.
7 CMA History File, 1947
After its sale to St. John’s Episcopal Church, the church was placed on foundations at the corner of Broadway and Royden Street in Camden. The structure remained there until it was destroyed by fire on Christmas Morning 1870.

LASTING INFLUENCE

Although the life of the chapel as a floating church was short-lived, the influence of the Floating Church of the Redeemer both locally and internationally, was significant. As the third floating chapel in the United States, the Floating Church of the Redeemer was central to the establishment of a new church typology, both ecclesiastically and architecturally. Previously, traditional churches had been constructed only on land in the United States. There was some precedence of 19th Century floating chapels in England, but these structures maintained the appearance of a traditional ferryboat rather than a carpenter gothic chapel atop a barge. By taking a well established church form, such as a gothic church with central spire, the Seamen’s Church Institutes produced structures that while they were easily recognizable and overtly referential to traditional churches, created an entirely new architectural form and experience. The church, which before had always be tied to the ground, could now float as a beacon in the middle of a river, unobstructed by surrounding buildings, for all of the city to see.

Ecclesiastically the floating church was also an innovation. Through their unusual approach to reaching the mariner population of their cities, the SCIs created moving structures that could be taken to areas most in need, yet also provided a permanent home for the congregation it created. Traditional moving church programs, such as revivals, lacked the strong icon or structure that was created by the floating chapels. The permanence and tangibility of the church building meshed the traditional brick-and-mortar church typology with the evangelical reach of a revival or other transient mission.

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The influence and notoriety of the Floating Church of the Redeemer was not limited to Philadelphia and the surrounding area. In 1851 for the Great Exhibition in London, a model of the Floating Church of the Redeemer was shown in the United States’ displays.\textsuperscript{10} The exhibition was a platform for countries to showcase their greatest innovations and commercial goods to an international audience. Most of the other items displayed by the United States represented the agricultural and commercial products created across the country. Therefore the national renown and influence of the Floating Church of the Redeemer, which had no economic value or impact, was great.

THE OTHER FLOATING CHAPELS

The Floating Church of the Redeemer in Philadelphia was not a singular occurrence of floating church architecture; New York City produced three floating chapels in the mid-19\textsuperscript{th} Century. Predating the Floating Church of the Redeemer, the Floating Church of Our Saviour was the first floating chapel to be constructed in the United States. It was built by the Seamen’s Church Institute of New York in 1844 and remained in the East River until it was deemed unseaworthy in 1866.\textsuperscript{11} In 1846, to meet the demands and popularity of the Floating Church of Our Saviour, The Floating Church of the Holy Comforter was constructed by the SCI and remained an active maritime church in the Hudson River until it was also deemed unseaworthy in 1868.\textsuperscript{12} After the retirement of the First Floating Church of Our Saviour, the Second Floating


Church of Our Saviour was constructed in 1866 and functioned as a floating chapel until 1910, when it towed to Staten Island and placed on foundations as All Saints’ Episcopal Church. However, in 1958, the Second Floating Church of Our Saviour burned on Christmas morning.¹³

Like the Floating Church of the Redeemer, the New York floating churches were variations of carpenter gothic churches built over existing barges. The First Floating Church of Our Saviour and The Floating Church of the Holy Comforter predate the Philadelphia church and therefore were likely influential in the design and construction of the Floating Church of the Redeemer. The Floating Church of Our Saviour, like the Floating Church of the Redeemer, had a 70-foot steeple and could accommodate over 500 people.¹⁴

Despite the popularity of the floating chapels by both maritime workers and the general public, the churches faced many problems associated with conducting services on water rather than on land. High winds and the motion of the rivers often caused attendees to become seasick or lose their balance.¹⁵ Other ships also collided with the churches as they maneuvered in the water, and the Floating Church of Our Saviour and the Floating Church of the Redeemer both sunk at times and had to be refloated.¹⁶

The difficulty of conducting services and other issues, such as securing a dock slip, led to the decline of the floating chapels in New York and Philadelphia, with the Second Floating Church of Our Saviour being the last. However, the Seamen’s Church Institutes that founded the churches continued and remains influential in the maritime communities they minister to today.

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THE SEAMEN’S CHURCH INSTITUTE OF PHILADELPHIA TODAY

The Seamen’s Church Institute of Philadelphia and New Jersey was founded in 1919 with the merger of the Churchmen’s Missionary Association and the Pennsylvania Seamen’s Friend Society. Today, the institute has a mission of supporting maritime workers through spiritual, social, and workers programs. They are located inland from the waterfront at 5th and Spring Garden Streets in Philadelphia, where they provide a chapel, recreation space, and other spaces for outreach and support programs. The SCI has a strong program for supporting workers’ rights through advocacy for social justice and fair labor polices, as well as programs for social and personal support, such as clothing and transportation.
Figure 16 - Floating Church of Our Saviour, First.
Image Courtesy of the Seamen’s Church Institute Archives.
Figure 17 - Floating Chapel Design, John Carver. Image Courtesy of the Athenaeum of Philadelphia.
Figure 18 - Lippencott Lithograph.
Image Courtesy of J.B. Lippencott Company.
Figure 19 - Floating Church of the Holy Comforter. Image Courtesy of the Seamen's Church Institute Archives.

Figure 20 - Floating Church of Our Saviour, Second. Image Courtesy of the Seamen's Church Institute Archives.
Figure 21 - English Floating Chapel.
Image Courtesy of the Strand Magazine.
RECONSTRUCTING THE FLOATING CHURCH OF THE REDEEMER

Through designing a reconstruction of the Floating Church of the Redeemer, the ideas associated with simulacra, presentness, and ambiguity are brought directly into question, and its is only through testing and examining the possibilities and barriers of these theories that the implications of reconstruction design can be fully understood. The application of theoretical concepts to physical form takes them from abstraction and forces their complications and shortcomings to emerge. Like the imagined reconstruction in our heads before it is designed and built, these theories have no faults in logic or application until made reality through use.

The creation of simulacra should be avoided in order to avoid the creation of false truths, yet the building must still represent and embody the original structure. Therefore, what is the threshold between a simulacrum and a new work of architecture that is only referential? Through understanding the critical elements and ideas of the historic building, the new design can illustrate the past while maintaining a comprehensible distance and vagueness. Questions of construction, appearance, materiality, and completeness drive the investigation to find the best possible means of evoking an understanding of the historic site, while creating something that is identifiable as a new construct.

But then, at what point does the newness of the design negate it as a reconstruction? If Eisenman is to be followed, and all architecture should have presentness, at what point does the new design lose its sense of the past in its search for innovation? The critical elements of the reconstruction – the ideas and issues that drive the arguments for reconstruction – should remain paramount, with any new presentness as a secondary and complimentary addition. The presentness of the
original, while lost in a reconstruction, should drive the new design as a means of understanding the driving forces of the architecture.

To form the dichotomies created in the determination of thresholds for simulacra and presentness, the new structure must distance itself from both the original and a definitive new. Ambiguity of material, form, and design provides the framework though which to express both the original and the replica. Distinctions in the design such as of material and detailing visually separate the public’s perception of the new and their imagined original, while critical components will still be expressed. These ambiguities and the thresholds they support are different for every reconstruction project as the available information, intent, and settings also inform the design. The proposal for the Floating Church of the Redeemer is a singular application and, while it serves to better define the role of the theory within reconstruction design, it does not endeavor to establish set guides or rules for reconstruction practices as a whole.

EXISTING DOCUMENTATION

Despite the popularity of the Floating Church of the Redeemer, little documentation of its appearance or construction exists. Documentation through images, drawings, and written descriptions are crucial to understanding a lost building. Without detailed information about the original, the reconstruction becomes increasingly based on conjecture and the judgments of the designer. It is this lack of understanding and available information that reinforces the creation of simulacra. Therefore, it is the responsibility of the architect to understand the existing documentation and what is missing and develop a reconstruction design that embodies the essence of the original, yet avoids creating false truths.

The only extant image, a lithograph published by the J. B. Lippencott publishing company, depicts the Floating Church of the Redeemer in the middle of the Delaware
River with the Philadelphia waterfront in the background. The church appears as a fully realized carpenter gothic church with a tall central spire, buttresses, and gothic detailing on all aspects of the elevations. Flying from the top of the spire is a banner with the word ‘BETHEL,’ the traditional name for churches associated with marine congregations. While at first look the lithograph appears to be quite comprehensive, it does not hold up to scrutiny of many of its details. The print also lacks any indication of materiality or construction, both of which are critical for any reconstruction effort. When compared to many of the written accounts of the church’s overall dimensions, it becomes evident that the Lippencott Lithograph skews reality for a more dramatic conception of the floating church. Were the drawing to use the known actual dimensions, the church would appear much less grandiose. Therefore, while the lithograph speaks to the presence and cultural significance of the Floating Church of the Redeemer, the accuracy of its representation of design and details must be questioned.

No other known visual documentation for the Floating Church of the Redeemer exists. The model of the church sent to London for the Great Exhibition in London has been lost, as have any drawings by Clement Dennington. The Seamen’s Church Institute of Philadelphia owns a wooden model of the church, but it was constructed in the 1950s long after the church had burned in Camden and appears to be a hobby model of the Lippencott Lithograph, rather than an academic attempt at reconstruction.

While there is little visual documentation of the church, its popularity led to many written descriptions in magazines and books in the 19th Century. However, most of these descriptions are brief and so similar in wording and detail that it is likely that they are all based on a singular account or description rather than personal experience. It is likely that this singular account was a caption from an addition of the Lippencott Lithograph, which often accompanies the magazine articles. Generally, the accounts describe the church as ninety feet long and thirty feet wide, with a 70-foot spire. The
church was placed on a platform attached to two ferryboats 10 feet apart and was capable of seating 500 people. The interior was decorated with frescoes to resemble brownstone and contained an organ of carpenter gothic style.

These descriptions provide key details for the overall size and appearance of the church, but like the lithograph do not give any insight into the construction or detailing. The unknown information still renders a traditional reconstruction of the Floating Church of the Redeemer infeasible. The plan of the building, specifically the vestry, is still unknown, as is the interior appearance. While the descriptions mention interior frescoes resembling brownstone, there is no detail for the interior structure, the ceiling configuration, the placement of the frescoes, or the design of the brownstone patterning. Without this information, a reconstruction of the church’s interior would be based solely on conjecture. The construction and materiality of the church is also still unknown. Because the church is carpenter gothic in style, it can be assumed that it was wood construction, but carpenter gothic churches exist both painted and stained, with intricate detail and with rough, unfinished details. The Lippencott Lithograph and written descriptions do not provide any insight into these specifics. It is also quite likely that the structural requirements for constructing a possibly 70-foot tall church on a boat would be quite different than that of a 70-foot tall church built on land.

The floating churches constructed in New York, while built by different organizations and designers, can also provide insight into the appearance of the Floating Church of the Redeemer. The First Floating Church of Our Saviour and the Church of the Holy Comforter both pre-date the Philadelphia church, while the Second Floating Church of Our Saviour was constructed after the Floating Church of the Redeemer. It is known that a committee from Philadelphia saw the Floating Church of Our Saviour and similarities in the designs can be seen in the existing drawings of both churches. Both churches have central spires, buttressing, and what appears to be a semicircular
vestry. Unlike the Floating Church of the Redeemer, the Floating Church of Our Saviour has drawings of its interior, which depict intricate groin vaulting, gothic detailing, and a domed vestry. There are also lines drawn on the walls resembling masonry, which could be assumed to be a similar fresco treatment resembling brownstone. However, like the Lippencott Lithograph, the images of the Floating Church of Our Saviour likely are exaggerated for visual effect and do not provide enough detail to really understand the construction and detailing of the building.

There is no documentation that the Philadelphians saw the Floating Church of the Holy Comforter and the Second Floating Church of Our Saviour did not exist yet, but both churches can serve as resources for understanding the typology of floating churches in the 19th Century. Both churches were designed with a more simple and modest architecture without the tall spires and buttressing of the earlier churches. This change in design may possibly reflect the issues of maneuvering and keeping afloat the larger, fancier churches, or may reflect a changing need for the congregations.

Unlike for the earlier churches, several photographs exist for the Second Floating Church of Our Saviour. While this church differs greatly from the Floating Church of the Redeemer, the photographs provide much more detail and accuracy than the lithographs of the other churches. From these photographs, it is evident that the last floating church had done away with the elaborate frescoes and protruding vestries for a more modest wood interior. The photographs also provide information about the transportation of the churches along the rivers via tugboats and the interaction of the churches with the land when docked.

PROGRAMMING

Although the driving force behind the reconstruction of a historic site is typically for interpretation and representation of the original, it is important for the
new structure to maintain a function that is relevant and useful to its contemporary audience. Therefore, to reconstruct the Floating Church of the Redeemer as a functional church ministering to the marine population of Philadelphia would not be relevant or sustainable for the building. There is a strong movement of demolishing churches in Philadelphia currently due to lack of use and inefficiency of existing churches. Also, the Seamen's Church Institute of Philadelphia and New Jersey no longer functions only as a church. Their other ministries, such as advocacy and social services are more predominant and successful.

The original Floating Church of the Redeemer had great presentness when it stood atop the ferryboats on the Delaware. It was a new typology and represented the cultural climate and needs of Philadelphia in the mid-19th Century. To reconstruct the church today with the same program and goals as the original would lose this presentness. The Delaware waterfront no longer maintains the strong industrial marine culture, with tourism and residential activities taking precedence in most areas. The marine culture that does remain is increasingly transient and is contained to the southern end of the Philadelphia waterfront near the Navy Yard.

Therefore, to address the changing social and spiritual demands of the Philadelphia waterfront, the reconstruction of the Floating Church of the Redeemer incorporates new programmatic elements to provide relevancy and ensure its use for more than a museum or exhibition. To fulfill the current needs of the Seamen's Church Institute, the reconstruction maintains the chapel, but also includes classrooms, meeting spaces, and a library and archive. With the inclusion of these additional functions, the SCI can move their efforts from their current inland location back to the waterfront. The reconstruction also functions as a space for public events and exhibitions for the general public. By incorporating these new elements into the Floating Church of the Redeemer and creating a space that is both a reconstruction and a new structure to
serve the contemporary public, it gains new presentness, while remaining tied to its historic roots.

SITE

In the 19th Century, the Floating Church of the Redeemer was docked in a slip at the foot of Dock Street on the Delaware River. At that time, the Delaware waterfront was lined with public and private wharfs, boatyards, and other marine based industries. With the Dock Street wharf as its base, the church could be pulled by tugboats to various locations along the waterfront to minister to the workers and sailors. Since the 19th Century, the waterfront of the Delaware has changed drastically. The shoreline has been built outwards and the docks have been replaced with residential buildings and parks, such as Penn’s Landing and the Race Street Pier. Marine industry remains near the Philadelphia Navy Yard to the south, but in a much diminished capacity.

If the reconstruction of the Floating Church of the Redeemer were to be sited in its original location, it would be located on dry land in Foglietta Plaza above Interstate 95. The fact that the church floated and was located on the Delaware River rather than on land is central to its typology and significance, therefore to reconstruct the church in this location would not be ideal. Extending out to the waterline from the original location, the new church can be located in the Independence Seaport Museum Marina. The marina houses both private boats and three historic ships, which function as exhibits for the museum. It is also part of the larger Penn’s Landing park and event space, giving it a strong public presence. Siting the reconstruction in this location gives it opportunities to function as an educational tool with the Seaport Museum, as a public even space, and as a base for the SCI.

Also critical to the typology of the original church, is the ability of the structure to travel to multiple locations. The reconstruction were only sited in the Independence
Seaport Museum Marina, the connection to the marine worker population of Philadelphia would be lost. Therefore, a second main site is needed. The Philadelphia Navy Yard in South Philadelphia is the center of marine industries for the City. From a dock at the Navy Yard, the SCI would have direct access to the people they represent and support. The reconstruction would embody the goals of the original with the educational and interpretive elements becoming secondary.

DESIGN

The reconstructed Floating Church of the Redeemer seeks to embody the critical elements of the original structure, while supporting a program and design that is relevant to contemporary culture. As an innovation in ecclesiastical architecture, the original church became an international icon with the image of a gothic cathedral floating in the middle of the Delaware as its main visage. As the only surviving documentation of the Floating Church of the Redeemer, the Lippencott Lithograph has become the idealized image with the greatest significance to contemporary viewers. It is the essential characteristics of this image that are necessary to create a reconstruction that will be accepted and understood by the public. The tall steeple, gothic arched windows and door, Gothic arch ribbing on the facades, and overall massing of the structure form the basis for representation of the original.

Equally important to the architecture of the original Floating Church of the Redeemer is its original mission and purpose of ministering to the waterfront population of Philadelphia and serving as the iconic base for the Churchmen’s Missionary Association. As with most reconstruction projects, the people, organizations, and their stories behind the buildings are crucial to a complete understanding of the structures. The Seamen’s Church Institute as the successor of the Churchmen’s Missionary Association and their work today is equally important to the reconstruction as the
gothic detailing.

A reconstruction should avoid becoming a simulacrum in order to avoid presenting a false history. However, the point at which a building avoids simulacra, but still presents the original structure as its main goal is not always clear. Projects such as Franklin Court avoided simulacra, but in doing so lost much of the history and possible representation of Franklin's original house. Colonial Williamsburg maintains a strong sense of history and representation, but created a hyperreal town full of simulacra. The approach taken by the reconstruction of the Floating Church of the Redeemer seeks to find the middle ground of these two extremes through identifying the fundamentals of the original and representing them in a manner that is explicitly different than the 19th Century form.

Material and visual ambiguity provide mechanisms for expressing these differentiations. Because there is not sufficient information available to understand the interior of the original church, the reconstruction does not to represent it. Instead, the exterior of the structure is expressed in relief as the interior of the chapel. Through inverting the exterior as the interior, the chapel is instantaneously understood as referential of the original, rather than as an attempt at recreation. The use of pre-cast concrete, a material and process not readily used in the mid-19th Century, differentiates the architecture as contemporary while presenting the detail and aesthetic qualities of the original.

Since the original exterior is now the interior, a new exterior is required. The building takes the form of a wood gabled structure atop a commercial barge. The exterior skin of spaced wood slats is reminiscent of the wooden construction of carpenter gothic, but is expressed in an abstracted manner. The pre-cast structure forming the interior chapel sanctuary is encased in glossy enameled steel panels, which present a simplified form of the original church and spire, visible through the voids between the
wood boards. This ghosted form behind the wood screen allows the iconic image of a gothic church floating on the water to be reinterpreted and expressed in a manner that is evocative rather than derivative of the original. The steel shell and concrete interior sit on the second floor of the reconstruction, with spaces for the SCI’s programs below. Visitors enter the chapel space through a main stair, which brings them up into the center of the sanctuary. This stair is the only entry or exit for the chapel; the steel outer shell is inaccessible.

Visitors and staff enter the reconstruction via a gangplank onto the front deck. They then enter on the first floor to access the new programmatic elements for the Seamen’s Church Institute. These spaces are on the first floor to serve as a base for the chapel above, which is accessed by the main stair. After going up the stair, visitors find themselves in the middle of the reconstructed chapel. The chapel is raised to the second floor so that it becomes the destination within the new structure. The higher location also increases its prominence when seen from shore.

The distinctions between the original Floating Church of the Redeemer and its reconstruction seek to establish new presentness that builds on the presentness and significance of the original. Eisenman argues that presentness is lost through reconstruction, but is necessary for all architecture. While his argument may hold true for entirely new architecture, reconstructions embody more than the importance and innovation of the current moment. Therefore, the presentness of the original should be made manifest in the new, but through a new lens and with an understanding of contemporary culture and architecture. The reconstruction of the Floating Church of the Redeemer embodies the iconic moment and presentness of a church floating on the water, but in a new manner with reinterpreted methodologies and programs. The structure respects the changing ministries of the Seamen’s Church Institute and presents the Floating Church of the Redeemer, not as a stagnant museum, but rather as
a continuation of the original ambitions of the Churchman's Missionary Association.
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Design is central to reconstruction. Without the interpretation and manifestation of available information by an architect, re-creating a historic site would be impossible, and it is this interpretive representation of history that determines the public’s perception and understanding. Therefore, it is critical that architects and preservationist address the architectural processes and theories to better understand the implications of design on reconstruction, preservation, education, and interpretation.

This thesis investigated three existing architectural theories and their application to architectural reconstruction. Simulacra and the issue of reality question the public’s perceptions of the re-created site. It is the charge of the architect to avoid creating a simulacrum and therefore creating a false history. Presentness addresses the significance of the original and the new. It is necessary for the presentness of the original structure to be understood and integrated into the new construct, but since its presentness will be lost it is equally important that the reconstruction have presentness of its own. Finally, ambiguity provides an approach to reconstruction design focusing on multiple interpretations of the original and avoiding portraying false or assumed information.

The proposal for the reconstruction of the Floating Church of the Redeemer tested these theories. Only through application and design work can architectural ideas be fully understood. However, for each reconstruction project, the thresholds between success and failure will be different. The available information, project goals, and cultural forces will all affect the design work and alter the requirements of the reconstruction.

The ideas discussed in this thesis are only a beginning for reconstruction theory and design. It is a topic that must further be addressed by architects and preservation
professionals. Existing concepts, such as simulacra, presentness, and ambiguity, can provide a foundation for reconstruction theory, but only through discussion, design, and research can the issues of architectural reconstructions be fully addressed.
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