

2012

"From Military Space to Community Space: The Readaptation and Reuse of New York's Armories"

Eve Rossmere

Fordham University, aaas_15@fordham.edu

Follow this and additional works at: https://fordham.bepress.com/aaas_senior

Part of the [African American Studies Commons](#)

Recommended Citation

Rossmere, Eve, "'From Military Space to Community Space: The Readaptation and Reuse of New York's Armories'" (2012). *African & African American Studies Senior Theses*. 13.
https://fordham.bepress.com/aaas_senior/13

This Dissertation/Thesis is brought to you for free and open access by the African and African American Studies at DigitalResearch@Fordham. It has been accepted for inclusion in African & African American Studies Senior Theses by an authorized administrator of DigitalResearch@Fordham. For more information, please contact considine@fordham.edu.

**“From Military Space to Community Space:
The Readaptation and Reuse of New York’s Armories”**

Undergraduate Senior Thesis

By

Eve Rossmere

Fordham University, 2012

INTRODUCTION

The purpose of this paper will be to make a case for adaptive re-use as a sustainable and valuable way to preserve historic buildings, while simultaneously providing the community with useful structures. This will be done by examining three New York armories as a case study, two of which have been readapted while the other is under negotiation. After evaluating the first two armories, the Park Avenue Armory on the Upper East Side of Manhattan and the Park Slope Armory in Park Slope, Brooklyn, this research will then be applied to the incomplete Kingsbridge Armory in the Bronx to consider the potential of its reuse and preservation. For the evaluations, I will examine the reuse and preservation of the first two armories, then will discuss how the processes of each may apply to the Kingsbridge Armory. To fully comprehend the value of preserving each armory, it is important to consult the different arguments concerning historic preservation methods, as well as their role in achieving landmark status for a building. Finally, it is instrumental to examine the history of their origins, as well as how each armory has reintegrated back into their respective communities after they have been repurposed.

As the need for sustainable options grows stronger with each passing day, society is pressed to find increasingly more creative methods to decrease our assault on the quality of the environment. Adaptive reuse is not only a creative way to preserve the beauty and history of a building, it is also a sustainable option to create new development that is beneficial to the community. Adapting old structures for new purposes uses less materials and natural resources, produces less harmful emissions to the environment by retrofitting with modern appliances, and preserves the integrity of the cultural history embedded in the building. Studies have shown that re-adapting a building can extend its useful life by approximately fifty years. For buildings that have existed for decades, that is a remarkable feat. A building is a physical monument to cultural history; a tribute to the events and trends of the time while simultaneously serving a purpose.

Certain architectural accomplishments, such as the New York armories, can be considered living works of art. The practice of adaptive reuse preserves the history of a building as well as making a positive, sustainable, and valuable contribution to the community.

In addition to establishing the value of repurposing a building, it is important to give attention to the practice of historical preservation. In regards to the preservation of historic buildings, there are two camps of opinions: those who support authenticity at all costs, and those who support "facadism". Authenticity advocates insist that the authenticity of a building must be preserved down to every last inch. This includes preserving the original facade, restoring and utilizing all of the original fittings and appliances, and only using the building for its original purpose. On the other end of the spectrum, facadists prefer to replace all outdated or damaged fittings, often leaving nothing but the original facade of the building. Additionally, the reuse of a building almost always requires that the function be changed from its original stated purpose, which is an end that facadists are more than comfortable with. To conclude the examination of the preservationist movement, attention must be given to the process of establishing landmark status for a building, and what those implications mean for its preservation and reuse.

After presenting the possibilities of the preservationist movement, it is essential to examine the buildings themselves. A detailed investigation of the history each armory will be provided, including original uses, a brief history of the National Guard, and how the armories functioned until they were repurposed to their present uses. It will be important to note why the original uses were no longer viable, what prompted the change, and how the current uses were decided upon. The present functions of the armories will be discussed, as well as how each of the first two armories reintegrated back into their communities after the implementation of their current uses. An examination of how the community views the armories and how the armories

view themselves will be provided. Finally, the key aspect of the examination will include the evaluation of the preservation and readaptation of each armory. It will be determined which preservationist persuasion they most closely identify with, and how well their goals were accomplished. Within the scope of preservation and re-use, the strengths, weaknesses, successes and failures of the Park Avenue Armory and the Park Slope Armory will be evaluated.

Once a thorough evaluation of each of the first two armories has been completed, the research gathered will be applied to the Kingsbridge Armory. The application of the research gathered from the Park Avenue Armory and the Park Slope Armory will be used to evaluate the potential strengths, weaknesses, successes and failures of the restoration and preservation of the Kingsbridge Armory. The possibilities under consideration by the Kingsbridge Armory Restoration Association for potential uses of the armory will also be presented. It will be important to evaluate the options of possible reuse of the armory while considering both the limitations and potential of its preservation and readaptation.

CHAPTER ONE:

THE HISTORY OF ARMORIES

The United States military history can be divided into two phases. The first began during the Civil War, at which time the National Guard was created. At the time, the National Guard

was the country's only source of military protection. It was run as a decentralized, state controlled army of citizen soldiers. This did not change until the early twentieth century, when the National Guard transitioned to the reserve army which we are familiar with today. During this period, the main military force of the country was a federally run central army, and the National Guard was converted to the army's primary reserve force. The time during which the National Guard was the primary military force for the country can be divided into three phases of its own. The first phase spanned from the early seventeenth century to the early nineteenth century, during which militia service was compulsory. Then, from the 1840's to the outbreak of the Civil War in 1861, the volunteer militia replaced the compulsory militia. Finally, from the late 1870's to the late 1890's during the Gilded Age, the National Guard "flourished as the country's primary domestic peacekeeper during an era of labor-capital conflict" (Todd 1).

While it was the primary provider of military defense for the country, the National Guard simultaneously served as a social mediator for matters that were too large for local police to control. During the Antebellum Age, New York City was one of the first cities in the country to experience the social and economic turmoil during the nation's transition to rapid industrialization and urbanization. A great deal of negative effects emerged as a result of this transition, such as overcrowding, unsanitary living conditions, and excessive work hours in an unsafe environment. Such conditions led to a great amount of social unrest and riots. Post-Civil War, the main source of social tension was spurred by the middle and upper classes' fear of and anger toward the influx of immigrant newcomers into their communities. During these times, several National Guard Militia units were called upon to maintain order. Likewise, in the 1830's and 1840's, militia presence was requested to suppress farmers rebelling against feudal-like system of land control in New York at the time. Decades later, the Civil War draft of 1863

prompted riots protesting the draft, for which the National Guard was again called upon to maintain social control and order. While these occasions were considerably dangerous and volatile, none compare to the post-Civil War labor-capital conflicts during the last third of the nineteenth century.

The labor-capital conflicts were the largest demonstrations of unrest that the National Guard had been called upon to manage by far. After the Civil War, urbanization, industrialization, and immigration spiked, causing society to be increasingly more class stratified than it had ever been before. The gap between the lower and upper classes grew dramatically distant, with the lower classes forced into extremely destitute conditions, such as unclean and cramped living conditions and unsafe working environments. Meanwhile, the very small upper class held a great deal of the country's wealth. This extremely unequal distribution of wealth led to political and civil unrest amongst the unemployed and working poor. Fearing the outbreak of all-out class warfare, the National Guard was brought in to control and suppress rioters and to maintain domestic peace as they had during countless riots in the past.

Given the consistent demand for their service, locally stationed units of the National Guard needed a base of some sort. Before the Civil War, buildings for the use of militia, mainly used for the storage, manufacturing, and repair of munitions, were referred to as arsenals. By 1870, the term armory had been introduced and became exclusively used to describe facilities built or adapted for the sole use of the militia. All armories built after 1879 were used as multipurpose headquarters for local units of the state's militia. The armories had three basic functions, which included operating as military facilities, clubhouses, and public monuments. As military facilities, armories served many purposes, primarily as headquarters for local National Guard units. These functions included warehouse storage for munitions, equipment, and

uniforms, sheltered grounds where guardsmen could train and drill, and self-contained centers where the state's domestic security forces could assemble in the event of an emergency. Their functions as clubhouses included serving the social and recreational needs of members. Lastly, within their parameters as public monuments, "armories were imposing symbols of military strength and governmental presence within a community, designed to inspire nationalism, patriotism, and community pride in law-abiding citizens or fear and awe in those tempted to challenge the status quo" (Todd 2).

While the term armory had emerged nearly a decade prior, it did not come to define a specific building type, uniquely American, until 1879 when the Seventh Regiment erected its armory on the Upper East Side of Manhattan. All armories had the same basic parts, layout, and distribution of the functions of space. They were each two-part buildings, one part consisting of an administration building and the other an attached drill shed. The characteristics of the building can be divided into four categories: function; form, layout and construction; location and setting, and architectural design and construction. Most armories (post-1879) were similar in terms of layout, following the same formula consisting of a multistoried administration building visually dominating the front and a large drill shed, the most important part of the armory, attached at the rear. The need for a fortified and unusually large sheltered space is the main motivating force and primary concern of the design of the armory. All later armories were constructed of masonry, with the nineteenth and early twentieth century armories featuring load-bearing walls, and later twentieth century armories boasting steel framed structures sheathed with a curtain wall made of masonry, usually brick.

In terms of the allocation of space and room configuration, armories after 1879 followed the same basic layout. Impressive entrances from the street led to an aesthetically striking foyer,

leading to a grand corridor flanked by several types of rooms such as offices, parlors, meetings rooms, libraries, officer quarters, lounges and studies. Under the administration building, large recreational facilities or mess halls would often be housed. Frequently located under the drill shed would be basement rifle ranges. As far as design and decoration, armories reflect medieval military architecture, mainly twelfth to fifteenth century European castles and fortresses. This derivative style is not only ornamental, but also to defend the armory in the event of an attack. The most prominent details of this style feature raised and battered masonry foundations, tall and narrow windows protected by iron grilles. From 1879 on, virtually every armory built followed this design theme and layout (Todd 2).

In the history of the New York militia, between the War of Independence and the Civil War, over two dozen arsenals, armories, and market armories were constructed. The earliest armory was built in 1799 in Albany, New York. When the state of New York passed the Act for the Defense of the Northern and Western Frontiers in 1808, the first state-wide arsenal construction program began. Another state-wide arsenal building program was started in 1858; however, the program was brought to an abrupt halt with the outbreak of the Civil War in 1861. After the Civil War, there was a clear period of slowing down across the nation. While the country was focused mainly on regrouping and rebuilding, not much energy was directed at new development. Even the emphasis on the military had considerably decreased, as the country poured most of its available energy into rebuilding crippled communities. This, combined with economic crises such as the Panic of 1873, left little money for new building projects.

However, the need for new armories eventually regained importance, and between the 1870's and the 1880's, eighteen new armories were built. With the exception of the Park Avenue Armory, the other seventeen followed the same method as the pre-war armories: masonry

construction, all located at the center of their respective communities. The following chapters will discuss how the Park Avenue Armory, although built chronologically in the middle of the post-war armories, established an "armory" style to be copied as for all future models. Unlike pre-war armories, which were paid for by the state government, all armories built after the Civil War in New York were financed by the cities or counties in which they were stationed. The post-war armories are also different from the armories built pre-war in terms of style. One can identify a chronologic trend of increasing size and elaborateness of architectural design. The post-war armories can be broken into three distinct groups, each with its own style. For the first group, the Second Empire style dominates, exemplified by symmetrical tripartite facades, bold center towers, and corner bastions. The second group can be distinguished by its consistently medieval Gothic mode of architecture, while the third is heavily influenced by the Romanesque Revival style.

While it is critical to study how, when, and why New York armories were built, it is also important to recognize that many of them no longer exist today. Over the centuries, the lifespan of an armory has proven to be somewhat varied, and not always favorable. During times of respite for the National Guard, an armory often went unused for a great deal of time. As a result of these occasions, many armories succumbed to the elements and years of neglect, particularly earlier armories whose construction was not advanced enough to last decades without constant maintenance. Similarly, a surprising number of early armories have been claimed by fires, such as the Canadaigua Arsenal, built in 1808 and destroyed in 1878. (Whether these fires were accidental or intentional has been undocumented.) According to the list of early nineteenth century armories compiled by Nancy Todd, the number of armories that succumbed to unexplained fires totals five. In addition to being destroyed by unexplained fires, many lost

armories are listed as simply being demolished, some with the explained purpose of rebuilding the original armory, while others were razed to make room for new construction. Unfortunately, the most common explanation is "building demise unknown," as is listed for the Centre Market Armory of the 1830's. It is particularly shocking that record of this building's usage dates through the mid-1800's, when records were readily available and used. It is a shame that a building of such proportions can be destroyed with no notice or formal documentation.

Although many have been lost over the past two centuries, not all armories have suffered the same unfortunate end. In fact, a considerable number of armories have been adopted for secondary uses, some of which date back to the early nineteenth century. This proves that the reuse of armories, or even the theory of readaptation itself, is not a new idea by any means. The fact that it has been occurring for close to two hundred years speaks to the legitimacy of the process. The first recorded example of this provided in Todd's records was the Russell Arsenal of St. Lawrence County. The arsenal was built in 1809 and was used infrequently after the War of 1812, and it was eventually sold at an auction to be converted into a schoolhouse. Likewise, the Central Park Arsenal of Manhattan, built 1848, was sold along with 152 adjacent parcels of land by the state to the city to be incorporated into the Central Park Master Plan. The arsenal was then converted into the first location of the Museum of Natural History, before the museum was moved to its current location on Central Park West in 1874. Presently, the arsenal contains the New York City Department of Parks and Recreation. Additional reuses of New York armories include housing the GEVA Theater Company in the Rochester Arsenal, and the Elmoood Music Hall in Buffalo.

In conclusion, it clear that adaptive reuse, particularly the reuse of armories, is not a new idea. In today's present state of pressing need for resources, especially for space in New York

City, adaptive reuse becomes an increasingly attractive and viable option. Armories present a unique space not often found in New York City: large-scale, uninterrupted space. The size and lack of obstructions make armory space very versatile, and therefore highly valuable, not to mention the value of the historic architecture and cultural significance. The following chapter outlines the importance of preserving armories for their cultural, architectural, and historical significance, as well as the economic and environmental value of their reuse.

CHAPTER TWO:

ADAPTIVE REUSE AND HISTORIC PRESERVATION

Adaptive reuse is an extremely viable option not only for today's development demands, but also as a *successful compromise between the two differing sides of the historic preservationist argument*. Current historic preservationists are divided into two camps. The first camp considers themselves to be true preservationists, and argue that when preserving a building, it is key to preserve every aspect and detail, including the original fittings and the original use of the building. The second camp, known as facadists, argues that one can preserve a building just the same by gutting it while only saving the skin of the building, and changing all other details, including purpose of the building. To fully understand this argument and how adaptive reuse is a successful compromise, it is useful to examine the merits of both camps.

Facadism allows for new development while saving a part of the building, but preservationists do not consider this to be actual preservation in the truest sense. Although in certain situations facadism is the more useful course of action, but the goals of preservationists more closely align with adaptive reuse. These include preserving the cultural and historical significance of a building, often times by designating it a historic landmark, while sparing the societal and environmental impacts that new development often causes. It is for this reason that adaptive reuse is an instrumental compromise between facadists and preservationists.

Facadism refers to the concept of demolishing the inside, or close to the entirety, of a whole building but leaving the façade intact. Some view this as a compromise between preservation and demolition, but many preservationists have met this concept with outspoken opposition, even characterizing it as worse than demolition. Donovan Rypkema, a Washington D.C. based consultant who specializes in the economics of preservation, believes that, “allowing ‘facadomies’ challenges the credibility of the preservation movement...Every time some historic preservation commission accepts a facadomy as ‘historic preservation’, it makes it more likely to happen again...” (Heffern) A facadomy usually involves coming close to demolition, retaining either one or two walls (often only the face) intact. However, there have been less drastic measures which leave the entire skin of the building intact, such as the Hearst Tower in Manhattan. The 46-story building rises out of the cast stone façade of the original 6-story building (ENR NY). Obviously, this practice is quite controversial. Some believe that it is a great solution to the demand for new development while saving costs, as well as a way to preserve the historically and culturally significant aspects of a building. True preservationists are against it, as they believe that facadism is vandalistic and just as destructive as demolition, while being entirely unsuccessful at preserving the historic significance of a building. A look into the history,

philosophy, and benefits of preservation will reveal why true preservationists strongly oppose facadism.

In the introduction to his book, *A History of Architectural Conservation*, Jukka Jokilehto masterfully sums up the subtle yet powerful merits of historic preservation: "As a constituent part of the affirmation and enrichment of cultural identities, as legacy belonging to all humankind, the cultural heritage gives each particular place its recognizable features and is the storehouse of human experience" (Jokilehto 1). Where preservation is concerned, a structure is allowed to preserve its cultural heritage while simultaneously serving a beneficial role in the community of modern day. According to Jokilehto, the roots of preservation can be traced to eighteenth century Europe, particularly during pivotal cultural movements such the French Revolution and the Age of Enlightenment. However, evidence can be found as far back as the Italian Renaissance that the preservation of cultural history was a significant social consideration. In his book *Historic Preservation: Curatorial Management of the Built World*, James Martson Fitch identifies the formation of the Mount Vernon Ladies Association in 1859 as the origins of the preservation movement in the United States, stating that they spurred a "conscious intervention in the defense of the national historic and artistic heritage" (Fitch 13). The movement to preserve historic buildings in Britain started in the 1770's. France established the Commission des Monuments Historiques, its national preservation agency, in 1831. America arrived at historic preservation much later than Europe, which is quite understandable considering that Europe has several more centuries' worth of history to preserve.

Fitch states that, in the United States, interest in historic preservation began with a growing appreciation of preindustrial material culture after the rapid industrialization of the western world. Once this movement gained speed, an increasing number of people believed that,

“the comprehensive protection of such monuments and artifacts, and the scholarly examination of the theories and techniques which procured them, is of central importance to our cultural future” (Fitch 23). Jokilehto comments on the philosophy of preservation, identifying what he cites as the three main motivations for historical preservation, the first of which being a “new sense of historicity and romantic nostalgia for the past.” The second motivation is the “desire to learn from past experiences and achievements,” and the third motivation comes from the “shock from destruction of previous arts and monuments” (Jokilehto 1). One can see how the innovations of major social movements, influential not only for Europe but for essentially the entire western world, could easily have triggered all three of these motivations, resulting in the modern conservation movement.

The built heritage of buildings provides knowledge of different stages of architectural design phases, as well as serves as memorials to the ancient world, therefore fulfilling the nostalgia Jokilehto references. He writes that theories established in historical periods are the foundations of our modern concepts of history and cultural heritage. Essentially, what was once current has over time become historical, which we now consider part of the foundation of our cultural identity. Alois Riegl, a nineteenth century Austrian art historian, was the first person to differentiate between traditional and modern conservation. Traditional conservation is intended to repair and maintain something as a memorial built intentionally to carry historic importance. Modern conservation involves a monument or structure previously built that becomes recognized as historic and associated with values specific to a culture, “signaling cultural heritage only in relation to its historicity” (Jokilehto 295). Readaptation, such as the reuse and readaptation of armories, can be considered a mode of modern conservation.

Jokilehto identifies four major influences on the safeguarding policies of historical preservation. The first influence is monuments as memorials. This was initially developed to preserve the political value of a building, such as churches, which were considered to display status depending on their extravagance. Later, this was extended to preserving the artistic and architectural significance of a building. The second major factor in conservation is stylistic restoration. This concerns the preservation of codified architectural styles. Restoration by style in a systematic manner was developed mid-nineteenth century by French historian Prosper Mérimée and French architect Eugène Viollet-le-Duc. This movement has been strongly supported by architects who stress the need to make use of historic buildings, instead of preserving them simply as documents.

The third influence is the development of modern conservation. In the second half of the eighteenth century, a new historical consciousness emerged and eventually became fundamental to evaluating historical structures. This signaled the beginning of modern conservation. The emphasis was shifted to preserving what is genuine and original throughout the different layers of history. According to Jokilehto, being authentic rose to the most important consideration, and became universally recognized as valuable to humanity. In addition, the development of modern conservation promoted the advance of the science and technology of conservation, including the development of new methods and techniques for analysis and documentation, the implementation of analysis of causes of decay, the consolidation of original material, new policies of maintenance and repair, and a shifted approach from artistic interpretation to critical evaluation.

The fourth and final influence of historic preservation that Jokilehto describes is traditional continuity. He refers to an “authentic” expression of creativity through cultural art,

which has developed over centuries as part of our expression of cultural identity. As a result, efforts to safeguard traditions of different areas and communities developed, which toward the end of the twentieth century have served to “guarantee [the preservation] of cultural diversity and continuity of our living cultures” (Jokilehto 304). Recently, the new concept of recognizing and respecting the changing needs of a community in addition to those of society has emerged. Previously, the main concerns of preservation were cultural and scientific, whereas now the emphasis has shifted in the direction of economic and environmental issues.

Another integral part of preservation is the designation of landmark status for a historical building. Achieving landmark status saves a building from potential demolition, and the title encourages people to recognize the historical, architectural, and cultural significance of a building. The process of designating a building or district as a historic landmark is complicated and extensive, but can save a piece of cultural history that might have otherwise been destroyed in the future. According to Landmarks Law, to be designated a landmark a building or district must be at least thirty years old and must possess “a special character or special historical or aesthetic interest or value as part of the development, heritage, or cultural characteristics of the city, state, or nation” (New York City Landmarks Preservation Commission). To designate a building or district a historic landmark, the Landmarks Preservation Committee has a detailed procedure. First, they must receive a Request for Evaluation, either from the public or a member of the Commission. Once a request has been received, the Commission will review the information submitted about the property to evaluate whether the requested subject meets the criteria for designation. Following the evaluation, potential landmarks are reviewed at public meetings, and a meeting is held with the owner’s representative to discuss regulatory issues. A final public hearing is held, during which a member of the Commission’s Research Department

makes a brief presentation, and all interested parties can submit statements concerning the proposed property (NYC LPC).

While the proposed property is under review, the Research Department compiles a report detailing the architectural, historical, and/or cultural significance of the district or building. The draft is reviewed by the owner's representative and the Commission, and is taken into consideration during the review process. The next step is for the Commission to vote at a public meeting. By law, six votes are needed to either approve or deny a designation. Within ten days the Commission must file a copy of the final designation report with the City Council, the City Planning Commission, and other city agencies. If a designation is approved, the City Planning Commission has sixty days to submit their report to the City Council to outline how the designation will affect zoning projects, projected public improvements, and any other city plans for development or improvement in the area. Finally, the City Council is provided one hundred and twenty days from the date of the Commission filing to either modify or disapprove the designation as they see fit. Fortunately for all three of the armories examined here, the City Council did approve all of their designations, as each one currently holds New York City Landmark status (NYC LPC).

To receive approval to perform work on a building once it has been designated a historic landmark, as was needed to readapt the armories, is another detailed process, but one that yields high benefits. To initiate the process, the building owners or tenants must apply for a permit from the Landmarks Preservation Commission. The Commission then will review the proposed alterations to determine whether they will disrupt the significant features of the building or district. The alterations are permitted to affect the property, but only if it is concluded that the effects are harmonious and/or appropriate. Often times, a member of the Commission will work

with the applicants to find appropriate solutions that meet the Commission's standards to issue the permit (NYC LPC). Fortunately, the armories discussed later were all granted permission for alterations, which has undoubtedly contributed to their preservation, and ultimately part of how they were able to become readapted, useful structures.

Readaptation is very similar to preservation in that readaptation provides the same benefits of preservation. The preservation and restoration of the building is critically important for both practices, but the only difference is that readaptation allows for a new use of the building to be improvised during its restoration, whereas preservation requires the building to maintain its original use. Fitch provides an in depth examination of the economic, environmental, and social benefits of readapting buildings. To start, he compares these benefits to the societal costs of new development. New development redirects a large quantity of resources away from developing nations. For example, the average middle-class American family can use 3,500 times more energy annually than a peasant family in India. At the current rate of industrialization, we are in dangerous territory in terms of depleting our already limited supply of natural resources, including land, forests, coal and oil, in addition to irreversible air, land and water pollution (Fitch 31).

To provide support for the benefits of reuse, Fitch quotes Harry M. Wesse, a Chicago architect who restored Sullivan's Auditorium Theater: "Can we afford to rebuild the environment every generation? ...One case for preservation is energy: important in the decision to recycle rather than rebuild. The residual value of energy built into old cities is enormous, packed into streets, utilities, and buildings: 1) time energy-manifold individual decisions over a period of development and use; 2) natural and human energy invested in materials and artisanship; 3) kinetic energy of construction and the fuel required. This is the energy

content of a city. Energy is wasted when any old building is pulled down" (Fitch 32).

Fortunately, there is a considerable amount of concern for this issue, and preventative measures have been long in the works. Fitch references a study done by Richard G. Stein and Associates and the Center for Advanced Computation, which proposes a formula to determine a plan of action when considering whether to destroy and rebuild, or to restore. This includes identifying the energy required for the restoration and rehabilitation of existing structures, as well as comparing energy efficiency of new buildings to the potentially rehabilitated model.

To further clarify the benefits of recycling a building, Fitch classifies different levels of preservative intervention by increasing radicality. The first level, preservation, is defined as the maintenance of an artifact without altering it aesthetically, but taking any means necessary to preserve it. Conservation and consolidation refers to any physical intervention that is to be taken to ensure the structural integrity of a building. Adaptive use, he defines, is an economic way to save buildings, sometimes their only option, by adapting it to the needs of the new tenant. Additional levels of preservation that Fitch includes are restoration, reconstitution, reconstruction, and replication. *For our purposes, we will concentrate mainly on reuse because it is the method of preservative intervention used on the armories discussed, and is the focus of this analysis; however, other methods may have been used on the armories at some time during their restoration.*

Reuse of buildings has been occurring as early as construction itself. It was very popular through the nineteenth and twentieth centuries; however, after World War II the approach lost momentum. Due to the high cost of labor, labor intensive methodology, federal income tax provisions permitting a capital tax loss on demolishing buildings, and the prestige of new styles and trends, popular support quickly adopted the reasoning that it is always cheaper to raze an old

building and rebuild a new one. In the past twenty years the tables have begun to turn, and recycling a building recognized as the more economic course of action than demolition and new construction. Fitch writes, "Adaptive reuse of old buildings is more economic not only in general terms (e.g., the conservation of energy represented by the built environment) but absolutely (i.e., relative costs of old and new built space)" (Fitch 169). In addition to the financial benefits of adaptation, including requiring less capital and time, reuse also relies less on expensive material because the projects are mainly labor intensive. Adaptive reuse produces beneficial social factors as well. As it is quite labor intensive, it provides a greater number of jobs available for people. In fact, the General Services Administration endorses proposed legislation that supports preference for adapting historically or architecturally significant buildings for federal office space to promote the availability of jobs.

In conclusion, adaptive reuse is arguably the best solution to the conflict between facadism, preservationism, and the demand for new development. Adaptive reuse fits the same criteria as preservation, while simultaneously providing a functional building to benefit the community. According to the Department of the Environment and Heritage, there are four criteria for adaptive reuse. The first is that the proposed site must hold societal value to the community. Another criteria is the potential for reuse of the site, including the damage that has been sustained, and the building's capacity to support the proposed use. The third criteria is the historical importance of the site, both as preserving a unified street-scape and the community's understanding of the past. The final criteria for adaptive reuse is the natural ecological conditions of the site as they pertain to the suitability of the proposed use and the work required (Department of the Environment and Heritage). Clearly, adaptive reuse is a perfect compromise, as it calls for the preservation of a building while also providing "new" development for the

community. In the following chapters, we will see how the practice of adaptive reuse was successful in preserving the Park Avenue Armory, the Park Slope Armory, and the Kingsbridge Armory, while also providing their respective communities with a purposeful, beneficial building.

CHAPTER THREE:

THE SEVENTH REGIMENT ARMORY

The history of the Park Avenue Armory, formerly known as the Seventh Regiment Armory, begins with the Seventh Regiment of the National Guard. The Seventh Regiment was created in 1866, when four companies of volunteer militiamen were joined together in Manhattan. Over a twenty year period of reorganization and growth, the National Guard had expanded to many more companies and regiments. The Seventh Regiment was originally known as the Twenty-seventh Regiment Artillery in 1826, but was officially redesignated the Seventh Regiment on July 27, 1847. The Seventh Regiment gained acclaim for their service, as they successfully suppressed major local disputes including the Election Riot of 1834, the Astor Place Riot of 1849, and the Staten Island Quarantine Riots of 1858.

In addition to their militia success, the Seventh Regiment was known for their status amongst the social elite. Often referred to by architectural historians as the Silk Stocking Regiment, most members of the Seventh Regiment came from Manhattan's wealthiest and most socially prominent families. In April of 1861, the Seventh Regiment was called to active duty to fight in the Civil War per special request made by President Abraham Lincoln. In 1874, the previous home of the Seventh Regiment, the Tompkins Market Armory on the Upper East Side, was heavily damaged by fire. To find a new home for his unit, regiment Colonel Emmons Clark petitioned both the local and state government and military to finance the construction of a new armory. They were not immediately successful at gaining financial support due to the economic depression following the recent Panic of 1873. Their first victory came in 1874, when the unit managed to obtain the city's agreement to subsidize a twenty-one year lease for the land on which the Park Avenue Armory presently stands. While they were not able to secure additional

monetary aid, members of the unit hoped to finance as much of the project as they could, and planned to rely on the generosity of private donors for the rest of the project.

Construction officially began in April of 1877. The unit was able to contract architect Charles W. Clinton, a Seventh Regiment veteran, to design the armory. The Seventh Regiment was ultimately able to garner the funds necessary to finance the project largely due to the National Guard's success in pacifying the Great Railroad Strike of 1877. The victory created a new image of the National Guard as champions of the middle and upper class social and economic lifestyle, which the Seventh Regiment shrewdly used in their favor to gain support and donations. By 1880, nearly all of the construction and interior spaces were completed. A private gala opening to honor the project's most generous donors was held in September of 1880, but the formal inauguration ball open to the public, which signal the official opening of the Seventh Regiment Armory on Park Avenue, was held on December 15, 1880.

While the history of the Seventh Regiment Armory is fascinating, its unique architectural style is equally worthy of note. As mentioned previously, architect Charles W. Clinton was commissioned for the project. The armory was designed in Gothic Revival Style, which began in England as a revival of medieval styles in the 1840s and increased in popularity rapidly through the early nineteenth century. It was constructed of load bearing brick, trimmed with granite belt courses, sills, lintels, and cornice work. The armory is comprised of the administration building, which faces Park Avenue between 66th Street and 67th Street, and a drill hall where soldiers would practice military drills. The administration building houses a reception room, a library, the veteran's room, and staff offices for ten regimental companies. The drill shed measures two hundred feet by three hundred feet (spanning from Park Avenue to Lexington Avenue), and boasts 55,000 square feet of uninterrupted space. Its concave clerestoried roof is supported by

eleven elliptical wrought iron arches. The floor of the hall is made of yellow Georgia pine, which was installed in 1879. The drill shed alone was designed by Charles MacDonald of the Delaware Bridge Company.

Like the drill shed, each room of the armory was individually designed by separate architects. The Veterans Room was, and still is, by far the most impressive room in the armory. Designed by Stanford White in the American Aesthetic movement of design, the room adopts exotic influence from many different cultures. The room proudly displays the earliest Louis Comfort Tiffany windows found in their original setting. According to Kirsten Reoch, Senior Project Director and Historian of the Park Avenue Armory staff, "Every surface of the armory could be considered works of art; everything [the ceiling, window sills, the fireplace, etc.] go beyond functional purpose." (Reoch). This accurately describes the true sense of design and luxury found in the Veterans Room, which permeates throughout the rest of the armory interior.

The lavish design, decorations, and furnishings of the interior spaces of the armory are not surprising, as it parallels the Regiment's elite social status. Though despite all of the attention paid to the interior, regular maintenance and renovations were still needed to keep the armory functioning over the years. In 1897, the building was wired for electricity, which was at the forefront of all design trends at the time. The armory was remodeled and expanded between 1909 and 1914, during which time the original tower was removed and a fourth story was added to the originally three-story administration building. The fifth and final story was added in 1931.

Just as the armory was changed and expanded over time, so were its uses. After the Civil War, the Seventh Regiment Armory's military activity decreased. It was often used for regimental events, such as gala balls and drill demonstrations, as well as for both public and private recreational and cultural events. According to Todd, "The Seventh Regiment Armory was

one of the first armories to serve as a civic center, a function that would later characterize all armories” (Todd 116). The Seventh Regiment became federalized for service at the start of World War I. As a result, there was no longer any military use for the armory, leaving it available to be rented out by the state. During the late twentieth century, the armory was used often for antique and trade shows.

One of the most interesting but little-known uses of the Seventh Regiment armory after it was discontinued for military use was as a women’s homeless shelter. The third and fifth floors of the armory serve as home to the Lenox Hill Neighborhood House Women’s Mental Health Shelter, which has been a presence in the armory since 1983. The shelter provides a temporary home to mentally ill homeless women over the age of 45, all of whom are in need of permanent housing. The Shelter is dedicated to rehousing the women while providing them with an interim safe and supportive environment fully able to address their immediate needs (Lenox Hill Neighborhood House). According to the research by Robert M. Fogelson in *America’s Armories: Architecture, Society, and Public Order*, the use of armories to provide temporary or long-term shelter for the homeless is not a new trend.

The practice started during the Great Depression era. In 1934, Mayor Fiorello La Guardia decided to convert several armories in New York City into daytime shelters for the homeless, six in total that year (Fogelson 228). The trend took hold again in the 1980s, “When homelessness in the city reached what several religious leaders called ‘crisis proportions’” (Fogelson 229). In 1984, there were approximately 60,000 homeless people in New York City as a result of a dire lack of low-income housing, and a move toward the deinstitutionalization of mental hospitals. Fogelson lists ten armories that were at some point in time used as a homeless shelter, including the Park Avenue Armory, the Park Slope Armory, and the Kingsbridge Armory (Fogelson 229).

The Park Avenue Armory provided other shelter needs as well, including temporarily housing victims and victims' families after the attacks of September 11, 2001. Currently, in addition to the women's shelter, the armory is also home to the Park Avenue Armory Conservancy (a not-for-profit arts organization), the 53rd Army Liaison Team of the New York Army National Guard, the Knickerbocker Greys (an after school program), and two veterans associations.

After having noted the historical and cultural significance of the armory, it is not surprising that the Landmarks Preservation Commission and the City of New York agreed to designate the Seventh Regiment Armory a historical landmark. The designation reports explain the architectural, historical and cultural significance of the armory, as well as describe the significant features which provide the basis for why it was awarded landmark status (LPC). The Neighborhood Preservation Center provides electronic copies of the actual New York City Landmarks Preservation Commission designation reports, which can be viewed by the public. The Seventh Regiment Armory has two designation reports, because both the interior as well as the armory itself have been declared landmarks. The armory was designated a landmark in 1967 because of its, "Special historical and aesthetic interest and value as part of the development, heritage and cultural characteristics of New York City" (LPC). The report also notes that the armory is of particular architectural value because it is an excellent example of two conflicting tendencies of nineteenth century architecture: romantic military architecture and expressive functionalism. The Landmarks Preservation Commission also preserved the armory because of its deep association with historically prominent New York families, as well as its military contribution.

The armory interior was given its own landmark status over thirty years later in 1994. The Commission felt so strongly about this dual designation because of the cultural and design

significance that the interior possesses on its own. A quote from the interior landmark designation report fully encapsulates the importance of the interior, as well as the armory itself: "Together with the Drill Room, highly significant for its engineering in the creation of one of the largest unobstructed spaces in New York City in its day, the interiors of the Seventh Regiment Armory represent the height of American interior design within a single building, for a 'single' (in this case the military) client, during a period of fifty years" (LPC). Clearly, the armory is a highly important part of New York City's cultural and architectural history, as it was deemed significant enough to be preserved as a landmark. The features for which the armory is legally preserved continue to be significant today, as well as functional. It is for these reasons, cultural, architectural, and historical significance, and the capacity to continue functioning as a viable building, that the Seventh Regiment Armory was a perfect candidate for readaptation.

The armory has been readapted to serve several purposes. As mentioned before, it serves as the home for the Lenox Hill Neighborhood womens shelter. Also, it is the headquarters of multiple National Guard veterans associations. However, the most significant, readaptation of the armory is the Park Avenue Armory Conservancy. Park Avenue Armory Conservancy is a not-for-profit arts organization whose mission is to revitalize the armory as a unique alternative arts space. According to an interview with Rebecca Robertson, President and Executive Producer of the Conservancy, "The challenge was to create the largest stage in New York, but that would work for both performance and visual arts... There's no other theater in New York that equally does both" (Taylor). Because of the distinct space that the armory affords, with the uninterrupted grand scale volume of the drill shed and numerous company rooms, the Park Avenue Armory is able to dedicate their work to both the development and presentation of visual and performing arts best realized in a non-traditional setting. Artists are able to work on their art in-house as a

part of the Conservancy's Artists in Residence program, by setting up their studio in an available company office, which allows the artists to be inspired by the versatility of the space. Due to the size and lack of obstructions of the drill shed, the space has the potential to be transformed into quite literally anything. A sample of previous installations include a performance by the Royal Shakespeare Company complete with three-tiered seating, a dance performance choreographed by Shen Wei (the choreographer of the Opening Ceremony of the Beijing Olympics in 2008) set inside of a site-specific sculpture *anthropodino* by artist Ernesto Neto, and a multimedia installation examining Leonardo da Vinci's *The Last Supper* set within a full-scale replica of the dome of the Refectory of Santa Maria Delle Grazie.

To restore the armory to its former glory, and make it fully capable to suit the Park Avenue Armory Conservancy needs, a restoration project has been running since 2006 when the State of New York transferred control of the armory to Rebecca Robertson. Robertson enlisted Swiss architectural firm Herzog & de Meuron for the upgrades and restoration (Reoch). The goal of the restoration project is not to make visitors feel as if they were actually in the nineteenth century; the armory has been retrofitted with all of the appliances and conveniences of modern day. The goal is to restore the armory's nineteenth century luxury and detail, but make it appropriate for use in modern society. In addition to electrical wiring added in the late nineteenth century, restoration of the extensive water damage suffered by the armory in 1992 was necessary. To support the full arts program envisioned for the armory, a \$68 million renovation that included an electrical, acoustical and mechanical upgrade of the drill hall was commissioned (Dobrzynski). The total budget for the room-by-room renovation was an estimated \$200 million; in total \$120 million has been raised and approximately \$80-100 million has been used to date.

The Conservancy reports that the renovation is near completion, and they estimate it will be finalized within the next five to eight years (Reoch).

When examining the readaptation of the armory, it is important to evaluate how economic the project was. The total cost of the armory in 1881, including furniture and fixtures, was \$605,000 (LCP). According to MeasuringWorth.com, this translates into \$785 million today in terms of the "project economy cost", which is calculated measuring a percent of the total output of the economy and the total importance of the project to society as a whole. Considering that the estimated total cost of the renovation is \$200 million, compared to what the cost to raze the armory and rebuild a completely new building would be, readapting the armory appears to be an appreciably economic option. Not only was it economically efficient, the readaptation of the Seventh Regiment Armory was also environmentally conscious. The building has been retrofitted with energy efficient lighting, and the electric appliances are much more sustainable than the original gas powered selections, which consumed more fossil fuel (Reoch).

In addition to being economically and environmentally sustainable, the readaptation of the Seventh Regiment Armory can be commended for preserving a piece of cultural history of the City of New York. Not only that, the project was able to stay within the parameters set by the Landmarks Preservation Commission while providing the community with a beneficial structure. By converting the armory into a cultural arts center, it has been able to reintegrate into the community by offering exposure to unusual art mediums. For the most part, the community has welcomed this change with open arms. When the women's shelter was opened in 1983 the process went smoothly and was met with no opposition, even though it was in a wealthy neighborhood. One protest occurred a year later, when the shelter requested to displace the Knickerbocker Greys and an existing tennis club to add two hundred and fifty beds, which the

community firmly refused (Fogelson 228). The community felt that the shelter was allowed to stay as long as it did not disrupt the current state of the community to which they were accustomed. There is potential for alienation, as the women's shelter is not highly advertised and is not associated with the Park Avenue Armory, especially considering the demographics of the neighborhood. However, the shelter may also create a sense of altruism that could benefit members of the community who do not normally give back, by affording them a new understanding and appreciation for those who live outside of their socioeconomic bracket. Nonetheless, the women's shelter has been a welcome and peaceful addition to the Upper East Side for almost thirty years.

Because of the Seventh Regiment Armory, military architecture style has been forever changed. "By virtue of its size, architectural sophistication, and location...coupled with its association with New York's most prestigious militia unit, the Seventh Avenue Armory became the prototype for the new building type throughout the state and, ultimately, across the nation" (Todd 101). By readapting the Seventh Regiment Armory as an arts institution, the Park Avenue Armory Conservancy has benefited the community, as well acted as a patron to the arts. Residents benefit from readily accessible exposure to the arts and culture. Reusing the armory for this purpose preserves the community's cultural heritage while simultaneously creating leisure activities and promoting community cohesion. Due to the unique space of the armory, new and unusual genres are given a platform they often have difficulty finding, giving them more exposure and impact. The unique space of the armory not only promotes under-catered realms of art, but also helps to cultivate it with their Artists in Residence program made possible by the numerous company offices. This appreciation of the arts and culture keeps the armory connected as part of the community in a functional way, as it is no longer simply an empty

monument. Now the armory pays tribute to New York City's past while benefiting the present community, and the future of the arts.

CHAPTER FOUR:

THE FOURTEENTH REGIMENT ARMORY

The Fourteenth Regiment of the National Guard was organized on July 5, 1847 as the result of an act of legislature which reorganized the New York militia system (New York State Military Museum and Veterans Research Center). They entered into active United States military duty, and successfully fought alongside other National Guard regiments at the First and Second battles of Bull Run during the Civil War. Other notable battles during the Civil War during which the Fourteenth Regiment fought include the Battle of Antietam, Fredericksburg, Chancellorville, Gettysburg, The Wilderness, and Spotsylvania Court House. It was during the First Battle at Bull Run that the regiment gained their historically famous nickname, the "Red

Legged Devils". The Fourteenth Regiment's service during the Civil War lasted from April 1861 to May 1864, after which they also fought in the Spanish American War and World War I as part of the 106th Regiment. During duty in the Civil War, the regiment was comprised mostly of abolitionists from the Brooklyn area. The regiment was lead first by Colonel Alfred M. Wood, then later by Colonel Edward Brush Fowler. Throughout their service in the Civil War, the Fourteenth Regiment was well known by other soldiers from both armies for their hard fighting, their combative drill, and their refusal to stand down from a fight. On December 7, 1861, New York State officially redesignated the regiment as the Eighty-fourth New York Volunteer Infantry, but at the request of the unit (due to their fame gathered from Civil War service, particularly at Bull Run), the United States Army continued to refer to them as the Fourteenth Regiment (New York State Military Museum and Veterans Research Center).

While the Fourteenth Regiment was part of the National Guard, their original purpose was to protect Brooklyn and its surrounding areas. Their state service included successfully suppressing the Angel Gabriel riots in Brooklyn during July of 1854, the Orange riots in July of 1871, the Railroad Labor riots in July of 1877, and the Motormen's strike in Brooklyn during January of 1895 (New York State Military Museum and Veterans Research Center). The Angel Gabriel riot was provoked by an anti-Catholic street preacher who referred to himself as "the Angel Gabriel". During the riot, the Fourteenth Regiment assisted the police by making numerous arrests. Veterans of the regiment formed the Fourteenth Regiment Veterans Associations, which continues to hold historic reenactments to honor the service of the regiment today.

The regiment purchased a parcel of land for \$79,000 in 1891 in a middle-class residential community slightly west of Prospect Park in Brooklyn's Park Slope neighborhood. The

construction of the armory transpired during a large increase in armory construction during the 1880s and 1890s. The New York regiments did not originally have their own armories, so they had to result to renting space in semi-public buildings. This lack of quarters was very discouraging to the volunteer militia, as well as to potential new recruits. A National Guard spokesman insisted that "first-rate" facilities were necessary to provide recruits with the best possible training to become capable soldiers. It was noted that rifle and drill precision, plus discipline and "esprit de corps" could only be taught in a space specifically designed to fit these needs: an armory. Eventually, New York State legislature gave in to the pressure from the Twenty-second Regiment and their supporters, and established the New York City Armory Board in 1884 (Fogelson 67-72).

The board was empowered by the State to construct armories for regiments of New York City at the expense of the city budget. In the 1880s, the state authorized Kings County, Brooklyn to build the Fourteenth Regiment Armory. However, like most new building projects, the construction of the armory was met with opposition from the public, largely by the middle-class. Their concerns were of the fiscal nature, as they questioned the luxury of the armories in relation to the purpose for which they were designed. Those who opposed the armory felt that the regiment should solicit funds from individuals and private corporations, instead of drawing from the state and city budget (Fogelson 67-72). Adding to their resentment, the regiment found themselves over budget several times during the construction of the armory, and the final cost of the project was \$650,000 (Todd 123-149), nearly double their initial estimate.

Despite the conflicts concerning the financing of the armory, its building was rather celebrated. The castellated architecture style that had taken hold of many armories of New York had spread to Brooklyn and is apparent in the design of the Fourteenth Regiment Armory. The

armory was designed by William Mundell, and was ready for occupancy in August 1895 (Todd 123-149). Mundell had previously designed the Brooklyn Hall of Records, as well as four other armories in New York. He followed the standard armory layout of the time, including an imposing administration building and a separate drill hall (Fogelson 67-72). The armory stands on 8th Avenue in Brooklyn between 14th and 15th Streets. As described in the *Brooklyn Eagle*, “[The administration building] is built in the style of old Norman castles, with arched openings, high parapet walls pierced by firing holes, and has heavy overhanging battlemented towers and turrets” (Fogelson 137). The interior can be considered almost as lavish as the Seventh Regiment armory, featuring a spacious entrance hall, a double staircase with fluted Corinthian columns, and a large stained-glass window by Louis Comfort Tiffany (Todd 123-149).

After World War II, the National Guard felt that armories were inefficient for military uses, and over time all units eventually moved out of their armories into more appropriate facilities. Once the armory ceased being used for military purposes, it essentially began a phase of reuse, “which for most armories, meant sitting empty waiting for adaptive reuse,” stated historian Francis Morrone (*Park Slope Armory*). The National Guard continued to occupy the Park Slope Armory until 1996, when ownership of the armory was turned over to the New York City Department of Homeless Services (NYC DHS). The City had already turned many of its vacant armories into homeless shelters during the 1990s, so the Park Slope Armory became another addition. It was at this time that a Brooklyn based community organization, CAMBA, opened a women’s shelter in the armory. CAMBA is a non-profit agency founded in 1977. Their mission is to provide the community with individualized services to help New Yorkers with issues including (but not exclusive to) homelessness, HIV/AIDS, domestic violence, and necessary job skills. The services and programs provided by CAMBA are not limited to the

homeless, they also offer their resources to people of low-income, those moving from welfare to work, those at risk of or transitioning from homelessness, those at risk of or living with HIV/AIDS, immigrants, refugees, and entrepreneurs of all ages (CAMBA).

CAMBA runs programs from over fifty locations in New York City, however most are within Brooklyn. The Park Slope Armory Women's Shelter is one of ten shelters run by CAMA . They began operating in the armory promptly after the National Guard vacated in 1996. The shelter provides temporary housing to approximately seventy women at a time, and approximately one hundred and seventy-five women annually. The shelter's services are tailored to women who suffer from mental illness and/or substance abuse. Although the housing provided at the armory is temporary, CAMBA is dedicated to providing a supportive, structured and therapeutic environment, complete with nutritious meals and comprehensive medical and psychological services. The ultimate goal of the Park Slope Women's Shelter is to help the women stabilize their condition so that they can move to supported and/or permanent housing (CAMBA).

Shortly after ownership of the armory was turned over to the Department of Homeless Services, Brooklyn's Community Board 6, plus local interest groups and several City agencies, convened to discuss the potential community use of the armory. Even though part of the armory was already being used for the homeless shelter, "Still, the community saw the potential for more" (*Park Slope Armory*). Under the Office of the Brooklyn Borough President, Community Board 6 formed the Park Slope Armory Reuse Task Force to undertake the responsibility of community-based planning to explore potential reuse options for the armory. The Borough President commissioned an Armory Reuse Study conducted by the Pratt Institute and the CUNY Graduate Center to research possible reuse options, the feasibility of each option, and community

feedback, among other things. Their research showed that the reuse option for the armory widely favored by the community was some type of education and recreational use (Community Board 6).

Finally, the efforts of the Park Slope Community were rewarded. With \$8.2 million from the Department of Homeless Services, \$6 million from former Council Member and current Public Advocate Bill de Blasio, and \$2 million from the Brooklyn Borough President's Office, the \$16.2 million dollar renovation project of the Park Slope Armory began (Kuntzman). There was much support for this project, as seen from a statement made by Brooklyn Borough President Marty Markowitz, "This is a fantastic way to turn this underused armory into a community resource" (NYC DHS). According to Gersh Kuntzman of *The Brooklyn Paper*, there were a number of delays throughout the project, most notably when the City had difficulty finding an outside operator for the facility. Eventually, however, the YMCA of Greater New York was chosen as the facilities operator. Per an agreement with the City, the YMCA generates revenue through donations, sponsorship, event fees, and memberships to support the overall operations at the armory.

To update the armory to best suit YMCA needs, many renovations were necessary. The renovation project in its entirety included renovations to the interior drill hall, the installation of new gymnasium equipment, and the addition of a new scoreboard. Also, the mechanical, electrical, lighting, and plumbing systems were all upgraded. New balcony seating and new restrooms were installed, and reparations were done to the existing trophy cases in order to be put to new use. Renovations and painting were done to the ceilings, walls, hallways, and floors, a new HVAC system was installed, an ADA code handicapped chairlift was added, and a code compliant fire safety system was integrated within the entire facility. In addition, eight new

classrooms were built to hold after school classes, summer camps, and community programs (NYC DHS).

As a result of these extensive renovations, the Park Slope Armory YMCA has become a highly welcomed addition to the community. Since its opening in January 2010, "It has [had] a strong emphasis on family programs... Before it was used to protect the community, but now it is a center for all of the community," stated Sandy Phillips, Director of Family Services at the Park Slope YMCA. The armory facilities are also used as a recreation center for nearby public schools that do not have adequate recreation space of their own, such as P.S. 107, a public elementary school situated across the street from the armory (*Park Slope Armory*). Due to the unusually large amount of unobstructed space, the 70,000 square foot drill hall has been renovated to accommodate events for track, soccer and basketball simultaneously (Kuntzman). According to the Commissioner of the Department of Design and Construction David J. Burney, FAIA, "The former Park Slope Armory is a fine example of [a] unique architectural form. Its large clear-span drill hall is a building type that can be very difficult to adapt to an appropriate new use. So the DDC is very happy to have completed the adaptive reuse of this building as a wonderful recreation and sports facility that will provide a much needed community facility to this neighborhood" (NYC DHS).

Not only does this readaptive initiative preserve the armory itself, it also preserves the cultural history of the community, while simultaneously providing the community with a highly beneficial recreation center. Having a recreation center easily accessible to the community promotes physical health among all ages, as well as engages members of the community from a young age. The Park Slope Armory YMCA provides children with a recreational outlet, which is particularly important for those who attend schools without facilities, and would have otherwise

been at a disadvantage. Healthy habits formed at a young age, such as regular physical exercise, increase a person's later health and longevity. Both the recreation as well as community classes offered by the Park Slope Armory YMCA provide engaging after-school activities; which are proven to keep at-risk children away from drug use and help intervene with the school-to-prison pipeline (After-School All-Stars). The classes offered by the Park Slope Armory YMCA are beneficial to all ages. By bringing families together, community involvement is promoted throughout the rest of the neighborhood. Finally, having a state of the art sports facility provides schools and community groups with a space to stage high level athletic events. From its inception, the readaptation of the Park Slope Armory has been a community project. It was members of the community who leaped at the opportunity to use the armory to their advantage, and then again to decide what the best use of the space should be. It is only fitting that this project, despite many roadblocks and its long awaited arrival, has truly benefitted the community.

CHAPTER FIVE:

THE KINGSBRIDGE ARMORY

The Kingsbridge Armory was the final home to the National Guard's Eighth Coastal Artillery District. Built between 1912 and 1917 by New York architecture firm Pilcher and Tachau, the armory stands in Bronx County at 29 Kingsbridge Road between Jerome Avenue and Reservoir Avenue. The Eighth Coastal Artillery District finds its origins with the Washington Greys, an infantry militia unit established in Manhattan during the late 18th century. The Washington Greys became the core of the Eighth Regiment, which was organized in 1847. In 1889, the Eighth Regiment plus an artillery unit, which was later known as the Second Battery, moved into an armory on Park Avenue. In 1895, additional militia groups moved in, so despite additions that had been made to expand the armory, the facility was far too limited in space to house the increased number of people. In addition, the Eighth Regiment had been converted from infantry to artillery. Due to the lack of space and their changed position, the cavalrymen petitioned the Armory Board for a new armory facility of their own (Todd 189-192).

The Eighth Coastal Artillery District opted to move their location to the Bronx, where the cost of living was much more affordable. The unit then obtained a site of sixty city lots upon which to build their armory. In 1911, Pilcher and Tachau was commissioned to design the unit's armory, and construction began in 1912. Standing on slightly more than four acres, the Norman inspired fortress occupies almost three full city blocks and boasts 575,000 square feet, making it the largest armory in the United States. The drill shed measure three hundred feet wide by six

hundred feet in length, which is three times the size of most New York regimental armories, and twelve to fifteen times larger than separate company armories. Pilcher and Tachau, a young firm whose principles had studied at Columbia University School of Architecture, had been selected for the project because of their recent design of the Troop C Armory, built in Brooklyn in 1903 (Fogelson 182-189). They heavily drew influence from the Troop C design when planning the Kingsbridge Armory less than a decade later. Like the Kingsbridge Armory, the design of the Troop C Armory is a significant departure from the castellated style traditional of 19th century armories. The dominant characteristics of the design of the Troop C Armory are simplicity, convenience and admirable lighting and ventilation, which *American Architect* called "L'Art Nouveau" style (Todd 189-192).

The departure from traditional castellated style is not limited to the Troop C Armory, but is actually apparent in a significant number of the armories built between the 1900s and World War I. According to Fogelson, "Repudiation of the castellated style had a profound impact on the design of armories in the 1910s and the 1920s" (Fogelson 189). This is particularly important because many armories were erected during this period, almost as many as were built during the 1880s and the 1890s, when armory construction was at its peak. National Guard leaders had requested for even more to be built, but not all of their requests were granted. Along with the Troop C Armory, the Kingsbridge Armory was one of the few armories built during this time to not resemble medieval castles (Todd 189-192).

The rejection of castellated styles foreshadowed new trends in armory construction. Select aspects of armory construction remained the same between the 19th and 20th centuries. Funding for the construction of new armories continued to come from the New York Armory Board. Likewise, the purposes of the armories built in the 20th century did not depart from the

purposes of the 19th century armories, including functioning as luxury clubhouses, military headquarters, and reminders of government presence and military strength. Also, the armories continued to be composed following the same basic layout, consisting of an administration building at the front of the armory, attached to an imposing drill shed at the rear. However, despite their similarities, the differences between armories built in the 19th and 20th centuries are far notable for their differences (Todd 189-192).

The differences between armories built in the 19th and 20th centuries mainly involve methods of construction and architectural design. Pre-1900, armories were made of load-bearing masonry construction. In the 20th century, armory construction was state-of-the-art, as they were composed of structural steel frames sheathed with a brick or stone veneer. During the 19th century, castellated fortress and medieval Gothic military styles were dominant among armory design. Post-1900 however, armory designs displayed a broader range of styles and levels of sophistication. Dominant styles of the time included Collegiate Gothic, Tudor Gothic, and Neoclassical. This new shift in architectural diversity can be attributed to available funding, political patronage, and the public's perception of the National Guard. In an attempt to boost their status in the public's favor, the National Guard undertook several nonmilitary initiatives during the early 20th century, including promoting armories for use as civic centers. Although armories had sporadically been used as community centers in the past, not until the early 1900s was it commonplace, and by the 1920s it was rather frequent.

On August 10, 1917, the Eighth Coastal Artillery District was redesignated the Eighth Coast Defense Command, which converted the unit into a motorized field artillery unit. Four years later, on October 11, 1921, the unit was redesignated again as the 258th Field Artillery. The armory was decommissioned in 1996, and was at that time turned over to the City of New

York to be used as a homeless shelter. Before this happened, the Landmarks Preservation Commission designated the Kingsbridge Armory a recognized city landmark in 1974. After carefully considering the armory on the basis of history, architecture, and the building's features, the Landmarks Preservation Commission found that, "the Kingsbridge Armory has a special character, special historical and aesthetic interest and value as part of the development, heritage, and cultural characteristics of New York City" (Landmarks Preservation Commission). Their reasons for preserving the armory as a designated landmark are that the Kingsbridge armory is an outstanding example of military architecture, it was at the time one of the largest armories in the world, and its Romanesque-style details, such as the massive towers and crenellated parapets. The incredible engineering of the immense drill shed is also noted.

In the late 1990s, the armory ownership was transferred from the state to the city in a state of complete disrepair. Since that time, members of the community have been working to readapt the armory to serve a beneficial function within their community. In 2005, the Northwest Bronx Community and Clergy Coalition (NWBCCC) convened KARA, the Kingsbridge Armory Restoration Alliance. The Bronx, although one of the most ethnically diverse neighborhoods in the United States, is also one of the most impoverished; there are only two other counties in the United States that are more poor than the Bronx. The community has long suffered the trials of working poverty, including a lack of "safe and affordable housing, quality education, access to good jobs and vibrant community spaces" (KARA). Since its inception, KARA has been working to redevelop the armory to meet these needs in an attempt to ease the economic hardships faced by members of the community daily. Meeting these needs by creating living wage jobs, developing new community space, implementing recreation facilities and more schools would dramatically improve the quality of life in the Bronx neighborhood. (KARA)

KARA garnered support by establishing solidarity over a unified vision for the armory in 2005 using a community charette. This vision became known as the "KARA Community Benefits Principles." The KCBP quickly gathered support from instrumental stakeholders within the community. As a result, KARA and elected allies attracted the attention of Deputy Mayor Dan Doctoroff. Deputy Mayor Doctoroff toured the armory in May of 2006, after which the city announced it would issue a Request for Proposals of the redevelopment of the armory. The City's Economic Development Corporation allowed six members of KARA to contribute to the creation of the RFP, which allowed the RFP to give preference to proposals that create the most living wage jobs and provide school space. Subsequently, the City reneged on this agreement, and The Related Companies was selected as the developer.

Stephen M. Ross, CEO of The Related Companies, planned to turn the armory into a mall. This would have created create 1,200 part-time jobs, which would have been under the living wage, and would have hired non-members of the community. Also, their development plans proposed less than 3% of the armory to be dedicated to non-profit community space, with no recreation facilities for youth or families. KARA feared that this plan would further entrench the community into a state of poverty. For the redevelopment of the armory, KARA has a very different idea. To start, their goals primarily include creating full-time living wage jobs, to help lift the community out of its current state of poverty. They would like to see a mix of commercial space that will not cause displacement within the community; in other words, commercial activity that will not compete with the existing successful businesses within the armory's neighborhood, as it is estimated that this will cost approximately four hundred residents their union jobs (KARA).

Another proposition of KARA is to create school space. Four small schools were proposed to be built on the armory grounds, because the neighborhood schools are extremely overcrowded. KARA hope that this would increase the rate of students who graduate high school in the Bronx, which in 2005 was estimated to be only one third of the students who enter high school. In addition to wanting living wage jobs, community space, and affordable commercial space, KARA wants to redevelop the armory with an environmentally sustainable design. This would be particularly beneficial not only to the environment, but also to the local community. The Bronx has one of the highest asthma rates in New York City, so this would be beneficial to the health of the members of the community.

Currently, The Related Companies is no longer the developer for the Kingsbridge Armory. As a result of the relentless efforts, KARA's demands were finally heard, and the City addressed the community's needs for an understanding developer. In 2009, along with the NWBCCC, KARA was able to establish support from Mayor Bloomberg to destroy the plan to turn the armory into a mall. The Related Companies refusal to require all of the mall's tenants to pay a living wage is the primary reason for the termination of the contract. The most recent RFP, which was similar to the one released in 2006, stopped accepting submissions March 22, 2012. Several proposals have been varied, including an ice hockey and skating rink, a cycling center, a megachurch, and a film studio. It is undecided at this time who will develop the armory and what its function will be, but the EDC is committed to selecting a developer who will include living wage jobs as part of the redevelopment plan (Wisniewski).

The current goal of KARA is to ensure that a Community Benefit Agreement will be signed with the selected developer, to establish some type of compromise concerning the development plans of the armory. A Community Benefit Agreement is an agreement between the

developer and the community to ensure that affected residents share in the benefits of development and that the development addresses a broad range of the community's needs. This allows the community to have a voice in shaping the project. (KARA) Once the EDC selects a developer, their proposal will be subjected to the Uniform Land Use Review Process, which will include public hearings.

The large amount of community involvement with the armory redevelopment is reminiscent of community participation during the Park Slope Armory redevelopment. Both communities capitalized on the endless possibilities that the armory spaces offer, and both have been dedicated to ensuring that the unique needs of their residents are met. However, while both the Park Slope community and the Bronx community have each labored tirelessly, the Bronx community has been faced with a much greater deal of adversity. This is in large part due to a lack of funding, which is a true misfortune because the Bronx community is one that needs financial assistance the most. The Park Avenue Armory, situated in an upper class neighborhood, had the advantage of receiving private donations from members of their community, who could afford to financially assist with the redevelopment of their armory. The Park Slope Armory was able to secure city funds for the redevelopment of their armory, because they were able to guarantee that the community would in turn support the redevelopment through purchasing YMCA memberships. Unfortunately, the Bronx community does not readily have the funds to offer financial assistance of their own to contribute to the redevelopment plan of their armory. However, what they lack in funds, they have over-compensated for in community involvement. KARA and the Bronx community plan to see the redevelopment plan through to the end every step of the way, even if it means doing a large amount of the leg-work themselves. Because of

their tireless dedication for seven years, the Bronx community will undoubtedly reap tremendous benefits once the Kingsbridge Armory has been redeveloped.

CONCLUSION

Examining armories for readaptation was particularly fascinating because of the unique space they present. The medieval military architectural style that transformed itself into what is known as "The American Armory" is impressive in its own right, and extremely different from

most buildings in New York. These armories resemble massive castles situated in New York City, their looming presence a constant reminder to residents that New York wasn't always the metropolitan hub that we know it as today. In addition to preserving a unique architectural style and harkening back to historical New York, armories should be reused in order to capitalize on their unique space. Space is becoming increasingly precious in New York City, and large-scale and uninterrupted space can be considered a rare treasure. As space becomes increasingly limited and valuable, the sheer amount of it in the armories presents a range of possibilities.

Not only does the reuse of armories functionally utilize their unique space, it also presents an economically and environmentally sustainable way to preserve the cultural history of New York City. While the designation of landmark status signals their significance, adaptive reuse takes it one step further by transforming these landmarks into functional and beneficial structures to the community. The reuse of the Park Avenue and Park Slope Armories, and the tremendous potential of the Kingsbridge Armory, is nothing short of inspirational, and sets an exceptional precedent for readaptation that I hope will be followed in the future.

Works Cited

- "Adaptive Reuse: Preserving Our Past, Building Our Future" *Department of the Environment and Heritage*. Commonwealth of Australia. 2004. Web. 21 April 2012.
- Community Board 6. *Neighborhoods: Park Slope*. The City of New York. n.d. Web. 19 April 2012.

Dobrzynski, Judith H. "Mustering the Arts." *The Wall Street Journal Online*. Dow Jones & Company, Inc. 20 December 2010. Web. 20 April 2012.

Factoids. *After-School All-Stars*. 2011. Web. 25 April 2012.

Fitch, James Marston. *Historic Preservation: Curatorial Management of the Built World*. Charlottesville: University Press of Virginia, 2001.

Fogelson, Robert M. *America's Armories: Architecture, Society, and Public Order*. Cambridge: Harvard University Press, 1989. Print.

Heffern, Sarah. "When History is Only Skin Deep: Is Preservation of Facades Really Preservation?" *National Trust for Historic Preservation*. 26 April 2001. Web. 21 April 2012.

"Homeless and Housing Services: Women's Mental Health Shelter." Lenox Hill Neighborhood House. 2009. Web. 24 April 2012.

Jokilehto, Jukka. *A History of Architectural Conservation*. Oxford: Butterworth Heinemann, 2002. Print.

Our Armory. *Kingsbridge Armory Redevelopment Alliance*. 2012. Web. 25 April 2012.

Kuntzman, Gersh. "The Park Slope Armory Has Opened (Really!)" *The Brooklyn Paper*, n.p. 11 January 2010. Volume 33, Number 3. Web. 30 April 2012.

Landmarks Preservation Commission. "Seventh Regiment Armory, Number 3. LP-0417."

Neighborhood Preservation Center, NYC Landmark Designation Reports. 9 June 1967. Web. 24 April 2012.

Landmarks Preservation Commission. "Seventh Regiment Armory Interior 259. LP-1884."

Neighborhood Preservation Center, NYC Landmark Designation Reports. 19 July 1994. Web. 24 April 2012.

Landmarks Preservation Commission. "Kingsbridge Armory Number 2, LP-0823."

Neighborhood Preservation Center, NYC Landmark Designation Reports. 24 September 1974.

Web. 24 April 2012.

Officer, Lawrence H., Williamson, Samuel H. *Relative Values of the U.S. Dollar Conversion Calculator*. MeasuringWorth.com. 2011. Web. 20 April 2012.

Park Slope Armory. Dir. Michelle Michalos. The City Concealed. 2010. Film.

"Park Slope Armory Women's Shelter." *Park Slope Presbyterian Church*. Park Slope Presbyterian Church. 2007. Web. 29 April 2012.

Reoch, Kirsten. Personal Interview. 9 March 2012.

"State-of-the-Art Recreation Center Unveiled at the Historic Park Slope Armory." *New York City Department of Homeless Services*. The City of New York. 11 January 2010. Web. 29 April 2012.

Taylor, Katie. "A Stage as Big as All Outdoors but Without Rain." *The New York Times*. The New York Times Company, 26 September 2010. Web. 23 April 2012.

The New York City Landmarks Preservation Commission. The City of New York, 2012. Web. 19 April 2012.

Todd, Nancy L. *New York's Historic Armories: An Illustrated History*. Albany: State University Press of New York, 2006. Print.

"Top Projects Started 2003-2004: Hearst Tower." *ENR New York*. McGraw-Hill Construction. 2012. Web. 20 April 2012.

Wisnieski, Adam. "The Armory's Future Still Has a Prayer." *The Riverdale Press*. 28 March 2012. Web. 3 May 2012.

"14th Regiment." *New York State Military Museum and Veterans Research Center*. New York State Division of Military and Naval Affairs, n.d. Web. 28 April 2012.

“84th Regiment” *New York State Military Museum and Veterans Research Center*. New York
State Division of Military and Naval Affairs, n.d. Web. 28 April 2012.