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An Institutional History of the Higgins Armory Museum and Its Relationship with Worcester, Massachusetts

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by

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Abstract

This thesis examines the institutional history of the Higgins Armory Museum through its connection with the industrial city of Worcester, Massachusetts. It documents the museum's beginning as a commercial museum connected with the Worcester Pressed Steel Company and analyzes both Worcester and the Armory's survival methods when their affiliated industries folded under economic pressures following World War II. The thesis follows the Higgins' attempted transformation to a nationally-recognized museum of arms and armor, and concludes with the Armory's identity struggles and eventual merger with the Worcester Art Museum.

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Chapter 1: Introduction

Located at 100 Barber Street in Worcester, Massachusetts, the Higgins Armory Museum is the largest arms and armor museum in the United States. Its collection contains pieces that have monetary and cultural values rivaling arms and armor within the Metropolitan Museum of Art, the Art Institute of Chicago, or the Philadelphia Museum of Art. Despite its internationally important collection, few outside the city of Worcester or the arms and armor community have ever heard of the Higgins Armory Museum.

The Armory's relative anonymity is a result of years spent as a local Worcester museum, intricately connected with the community from its inception. Industrialist John Woodman Higgins started the Worcester Pressed Steel Company (WPS, or PRESTEEL) in the early 1900's. An avid collector of armor, Higgins saw the artistic side of steel and commissioned a museum in 1929 to house his growing collection and inspire his workers. He designed the armory to showcase craftsmanship in steel, both ancient and modern, evident as visitors moved from galleries of medieval armor to ones exhibiting products of WPS employees. As a company museum, the Armory's fortunes were bound to Worcester Pressed Steel as well as to the economic fluctuations of the steel industry. The museum's tumultuous history reflects the struggles of its community, as does it rebirth and redirection. This thesis will examine the success and decline of the industrial city of Worcester through the lens of the Higgins Armory Museum and discuss the actions both the city and the museum took to survive divorced from steel.

Chapter 2: Successes in Steel

John Woodman Higgins graduated from Worcester Polytechnic Institute in 1896 and entered Worcester's thriving workforce through his family's Worcester Plunger Elevator Company. His father, Milton Higgins, sold the company in 1902 to Otis Elevator Company, but John stayed on and used the elevator industry as a testing ground for experiments in steel. Higgins favored rolled, pressed steel over castings as it proved to be stronger and more economical to produce. He and his father purchased the Worcester Ferrule and Manufacturing Company, which they renamed Worcester Pressed Steel. [1]

A heavily industrial city with a strong workforce, Worcester offered the ideal environment for the new steel company. American steel was highly profitable through connections with railroads and expanding automobile industries. Additionally, rapid economic growth in the early 1900's encouraged increased steel consumption, resulting in decentralization and allowing smaller steel companies to succeed alongside larger, fully integrated steel corporations.[2] Worcester Pressed Steel initially specialized in bicycle and automobile parts, but during World War I, British contracts for bronze Howitzer castings and the American need for helmets, bayonet scabbards, anti-shrapnel

[1] Carter C. Higgins and Bradley Higgins, "Craftsmanship in Steel," The John Woodman Higgins Armory, Worcester, MA, (USA: The Newcomen Society in North America, 1956); *John Woodman Higgins and the Higgins Armory Museum* (Worcester, MA: Higgins Armory Museum, 2010).
[2] Hans D. Rosebrock., "Dynamic Changes and Locational Shifts in the U.S. Steel Industry," Economic Development Review, (January 1, 1999): 55-60.

goggles and cartridge cases quickly pulled the company into the upper tier of successful Worcester industries.[3]

Early 20th century historian Charles Nutt claimed that Worcester's prosperity came from its variety of manufactured goods. He asked, "Why do we hear the sound of a thousand factory whistles every morning? Why do new factories creep outward from the old city and spread clustering dwellings about them? Why are Worcester banks teeming with the savings of an army of skilled mechanics?" He answers that it is because of Worcester's industrious population. More telling, however, is Nutt's description of the city in 1918. He presents a city supported by factories and teeming with industrial workers.

> To give a list of even the most important products of the factories would be to catalogue almost everything that human ingenuity can produce. Perhaps wire and wire goods come first on the list. Looms, lathes, all kinds of machine tools, agricultural machinery, shoes, card machinery and cards for textile manufacturing, carpets and rugs, envelopes and envelope machinery, razors, wrenches, fire-arms, forgings, rail road cars, elevators, are made in great variety. In grinding machinery, polishing machinery, corsets, cotton and woolen goods, pressed steel devices, wall paper, valentines, leather goods, the city ranks high.[4]

Worcester's diverse industries helped drive the American Industrial Revolution and shaped the city's identity. Higgins' steel company grew up alongside the American Steel and Wire Company, a leading producer of barbed-wire, piano-wire and hoop skirt wires that supported 6,000 employees.[5]

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[3] Carter Higgins and Bradley Higgins, "Craftsmanship in Steel."
[4] Charles Nutt, History *of Worcester and its People, (*New York City: Lewis Historical Publishing Company, 1919).
[5]Dan Ricciardi and Kathryn Mahoney, "Washburn and Moen: Worcester's Worldwide Wire Manufacturer," *Worcester and Its People*, College of the Holy Cross Northworks Project, http://college.holycross.edu/projects/worcester/immigration/northworks.htm.

In 1908, the Royal Worcester Corset Company reported 1,200 female employees, making it the United State's leading employer of women.[6]

The American Steel Industry, Worcester, Massachusetts, and Higgins' Worcester Pressed Steel Company thrived in the period following World War I. European nobility did not. Political, social and economic upheavals forced them to open their homes to ambitious buyers and allowed John Woodman Higgins to indulge in his hobby of armor collecting.[7] Fascinated with metal-working from a young age, Higgins appreciated craftsmanship in ancient and modern steel, and filled his home and PRESTEEL offices with his armor acquisitions. The Metropolitan Museum of Art's Arms and Armor Curator, Bashford Dean, guided him to purchase seven valuable suits of armor from art dealer Joseph Duveen in 1928, and a growing lack of space initiated plans for the collection's public display.[8]

A 1927 family trip to Europe introduced Higgins to a type of museum that did not yet have a strong presence in the United States, a museum of practical products. Seeing the merit of exhibiting both ancient and modern examples of steel workmanship, Higgins devised a museum to display both his arms and armor collection and the products of PRESTEEL. Higgins' creation began as an industrial museum showcasing the evolution of metalwork.[9]

American steel in the early 20th century conjured ideas of prosperity, success and innovation, and John Woodman Higgins succumb to its allure. He collected arms and

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[6] Melvin G. Overlock, "Driving Tuberculosis out of the Industry," *The World's Work* 23, (November 1911-April, 1912): 295.
[7] Walter Karcheski, *Arms and Armor at the Art Institute of Chicago* (Chicago: The Art Institute of Chicago, 1995), 9.
[8] *John Woodman Higgins and the Higgins Armory Museum*, 9.
[9] *John Woodman Higgins and the Higgins Armory Museum*, 13, 14.

armor as examples of functional art and saw the modern steelworker as the creator of a similarly artistic product. By showcasing the loveliness of ancient and modern steel, Higgins planned to inspire steelworkers and the Worcester community with his fledgling museum. However, Higgins' ideas met with initial trepidation. PRESTEEL management worried that a museum exhibiting their products would reveal trade secrets to competing steel companies. In a speech about his father John, Cater Higgins would later argue that "If industry does not let the public into its plants and its thinking, how can we hope for sympathetic understanding? John Higgins was a pioneer for public relations."[10]

Higgins' Steel Museum was incorporated in 1928, with the goal that through its ancient and modern pieces, it would instill in visitors an appreciation for metalwork and reveal the beauty in functional items. Higgins believed so strongly in his model that he encouraged every industry to establish its own technical museum. Such institutions would ignite community pride, inspire workers, and allow perspective clients to view a company's products. They would teach trade history, showcase products and encourage further industrial research.[11] Higgins hired Boston architect Joseph Leland to design his museum in 1929. Leland's two-story, "L" shaped building was a work of steel innovation. It was the first multi-story building in the United States with an exterior made entirely of steel and glass.[12] The Steel Museum occupied the upper two floors, while the lower half served as PRESTEEL offices.

[10] Carter C. Higgins and Bradley Higgins, "Craftsmanship in Steel," 20.
[11] Carter C. Higgins and Bradley Higgins, "Craftsmanship in Steel," 25.
[12] Higgins Armory Museum, *National Register of Historic Places*, National Park Service, accessed December 3, 2011, http://nrhp.focus.nps.gov/natregsearchresult.do?fullresult=true&recordid=0.

Figure 2.1: Leland's steel and glass creation, looking much the same in 2013 as in it did when first built.[13]

The new building was built directly in front of Worcester Pressed Steel, linked to its parent company by a passageway and catwalk that allowed visitors to tour the museum and then view the factory itself. The upper museum floors were "arched and plastered to form a two-winged hall" that Higgins and Leland designed to resemble the Great Hall of Prince Eugene's castle in Hohenwerfen, Austria, a sight that had greatly impressed Higgins on his European travels.[14] The two wings of the museum's Great Hall featured "ancient" and "modern" subject matter; the former showcasing chronologically exhibited suits of armor and ancient weaponry while the later displayed pieces of modern metalwork that included automobile parts and other "crowning examples of mass production," such as airplane parts and utensils.[15]

[13] Bill Greene photographer, "Higgins Armory Museum to Close," *The Boston Globe*, March 8, 2013, http://www.bostonglobe.com/arts/2013/03/08/higgins-armory-museum-close-arms-and-armor-worcester-art-museum/3Y4p45OpkfMrQxSGmlP3NP/story.html.
[14] Carter C. Higgins and Bradley Higgins, "Craftsmanship in Steel,"21.
[15] Libbie Armstrong, Public Relations and Membership Coordinator at the Higgins Armory, telephone interview with author, November 4th, 2011.

Figure 2.2: The Ancient and Modern Wings (left and right) of the Higgins Armory Museum.[16]

Visitors could also follow a silver line that led through the exhibits to the gallery of the plant and observe PRESTEEL workers in action. Guides and labels within the gallery explained the machinations of steel working, including comparative strength, weight, and costs as well as the processes of rolling, drawing, stamping welding and tempering metals.[17] John Woodman Higgins hoped that by allowing visitors to experience steel workmanship firsthand, he could inspire them to see modern industry workers as creators of functional art, similar to armorers. He lamented, "Early Gothic armor was rightly classed with the fine arts, but modern supersonic aircraft, submarines, missiles and rockets are just machines."[18] Higgins hoped that a visit to his museum would cause people to think differently.

The Steel Museum officially opened to the public on January 12, 1931. Over 600 people attended its opening ceremony that included a performance by the Boston Symphony Orchestra. The new museum was a shining example of the success of

[16] *John Woodman Higgins and the Higgins Armory Museum*, 14.
[17] John Woodman Higgins, "The Steel Museum," Invitation Circular for the John Woodman Higgins Armory, undated, Higgins Armory Museum Archive, Worcester, MA, accessed 2012, 3.
[18] Steven V. Grancsay, *The John Woodman Higgins Armory Catalog of Armor* (Worcester, MA: The David Press, Inc., 1961), 7.

Worcester industry. In an invitation circular for the Steel Museum, John Woodman Higgins wrote,

> We metalworkers, here in this creative, altruistic research laboratory and library of historical information, compare our modern products with masterpieces of the past-our tools, machines, wages, living standards, ambitions and fun, with the romance of traditions and visions of future opportunities…[19]

Higgins could afford such romantic language; the new museum brought in two to four thousand visitors a month and Higgins spoke of adding an armorer's shop, a village smithy and a "picnic grove near our two hundred year old iron 'Silver Mine.'"[20]

The Steel Museum appeared at a time when Americans found glory in industry and was a direct reflection of the success of American steel. Joseph Leland's innovative steel and glass museum building certainly took architectural inspiration from Higgins' desire to promote the beauty of steel, but also had roots in early 1930s construction trends. A 1931 edition of Worcester's *Evening Gazette* lauded the new all-steel building as indicative of an increasingly popular construction style that minimized masonry in favor of lighter steel materials. The Department of Commerce stated that chrome nickel steel and other alloys were in high demand because they put less weight on foundations and steel frames than masonry, ultimately reducing construction costs. New steel alloys resisted rusting and were slowly replacing masonry even on building exteriors, a trend that the Steel Museum building took to an extreme. The *Gazette* reported that chrome nickel steel ingredients cost twenty five to fifty percent more than ordinary steel, but

[19] Higgins, "The Steel Museum," 27.
[20] Grancsay, *The John Woodman Higgins Armory Catalog of Armor*, 6-7.

Federal officials correctly predicted that prices would drop as demand increased, and this would further promote the all-steel trend.[21]

Worcester had another innovation in its American Steel and Wire Company. A center for industrial research in the 1930's, the company designed a process called austempering that allowed for continuous production of springs and other small, carbon-steel products.[22] Thomas Misa's *A Nation of Steel* cited the American Steel and Wire Company as an example to support his argument about the existence of American steel innovation, though this evidence is only a small counterpoint to Misa's more significant observations about strong foreign competition within the industry. With American success, foreign competitors saw the value of steel and the possible profits that lay in increased efficiency. Worldwide steel innovations that outmatched American technologies threatened in the early 1940s, but were postponed by World War II's sharp increase in production demand.

The onset of World War II and defense contracts brought the next wave of success to steel companies and Worcester's industries. The Worcester Pressed Steel Company received nearly a million dollars in contracts to produce aircraft motor parts and shell casings for the United States, as well as machine gun parts for the British military. The Steel Museum, also called the Higgins Armory, displayed PRESTEEL's wartime prosperity by exhibiting the products of its workers, including a full-sized, Piper Cub Airplane replica. Parts manufactured by the Worcester Pressed Steel Company were used in constructing the plane, which was suspended from the ceiling of the museum's Modern Wing in 1941.

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[21] J.C. Royle, "City Building Gains Notice," *The Evening Gazette*, January 17, 1931.
[22] Thomas J. Misa, *A Nation of Steel* (Baltimore, MD.: John Hopkins University Press, 1995) 260.

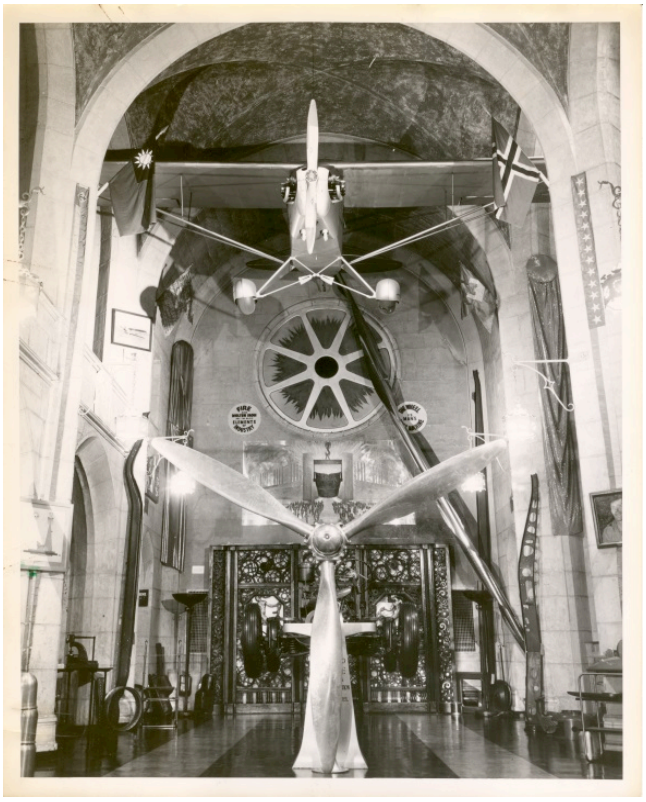

Figure 2.3: The Piper Cub Airplane in the Higgins Armory Museum's Modern Wing.[23]

The tremendous influx of business during World War II nearly doubled the production of American Steel. According to the American Iron and Steel Institute, production increased from 85 million tons to 141 million between 1947 and 1969, peaking in 1958. At its height, the industry employed 650,000 workers, and the increased demand for smaller, specialized "mini mills" allowed for industry growth outside of major business centers.[24] Because they focused on the production of specific objects, the steel companies of Worcester benefited from the decentralizing trend. Local journalist Adrian Hayward wrote that 1958 was an expected production peak, and claimed that in the midst of such achievement, Worcester stood out for its progressivity. Front-runners

[23] *John Woodman Higgins and the Higgins Armory Museum*, 17.
[24] Rosebrock., "Dynamic Changes and Locational Shifts in the U.S. Steel Industry," 55-60.

for their early innovations, Worcester steel companies continued to aspire to greatness. They had something more inspiring and constructive than most steel cities- Higgins' museum, an innovative combination of art and vocational education.[25] Hayward predicted that with such advantages, Worcester steel was poised for continued success.

With the benefit of hindsight, Hayward's article seems like foreshadowing. The year 1958 was a peak, after which American Steel slumped and allowed foreign competitors room to compete, spelling disaster for Worcester and steel companies across the country. The article was also correct in its assertion of Higgins' innovation. His museum was a leader in the commercial museum trend, a concept Higgins actively worked to further. He published numerous articles on the importance of craftsmanship in industry, and argued that productivity would increase if workers understood the history of their craft. Additionally, Higgins saw his museum as a tool to inspire public support, one so valuable that he advocated for every industry to establish its own technical museum.[26]

[25] Adrian Hayward, 1956 newspaper article in the Higgins Armory Museum Archive, Worcester, MA, accessed 2012.
[26] *John Woodman Higgins and the Higgins Armory Museum*, 20.

Chapter 3: The Higgins Armory as a Commercial Museum

With a large portion of its economy due to technical industry, Worcester was an ideal location for a technical or commercial museum. Higgins saw his Armory as a tool to teach steel history and inspire both workers and the public, a valuable concept that was slowly beginning to catch on with other American companies. Even if they did not have a technical or industrial background, companies saw the merit of having their own museums, particularly as a method of public outreach. Such museums also served as outlets for design, research, legal and patent studies, sales training, tours, and institutional advertising.[27] Company museums provided education, advertising, and economic innovation, all wrapped up in a culturally-relevant package and marketed as a leisure activity. American businesses would soon catch on to the trend. In 1944 there were only eighty museums connected to specific companies, by 1956 there were several hundred. Of those, the John Woodman Higgins Armory stood out as one of the best known examples of a company museum, grouped with the Corning Museum of Glass, the Chase Manhattan Museum of Moneys of the World and the Home Insurance Company of New York's collection of firefighting pieces. Companies reported that the benefits derived from running a museum far outweighed the expense, saying that it was a painless and effective way of acquainting new employees and the public with the company and its products.[28]

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[27] Carl Spielvogel, "Gratifying Public Reception Encourages the Establishment of Company Museum," *New York Times*, Sunday, April 1, 1956, 1.
[28] Spielvogel, "Gratifying Public Reception…," 1.

The concept of museums supporting industry has roots in the philosophy of museum theorist John Cotton Dana and the innovation of the Philadelphia Commercial Museum. Founded in 1893, the Commercial Museum was the only institution of its type. It offered Americans a glimpse of a commercial empire in material form and was inspired by Chicago's 1893 Columbian Exposition. The goal behind the museum's creation was to take the temporary aspects of the exposition and turn them into a permanent installation. There was a great deal to be learned from the exposition, and the museum's founders wanted to make those economic lessons available. Once established, the museum aimed to foster American economic expansion in overseas markets by displaying commerce through spectacular exhibits and publications.[29] It existed to assist and promote American business, and to reassure leery Americans that imperialistic negatives did not always accompany commercial expansion. The museum taught that objects of commerce had inherent meanings, and when exhibited, understanding those objects could substitute for direct economic experience. Since objects could be substituted for experience, Americans could learn without the direct hardship of colonial responsibilities. The Commercial Museum exhibited utilitarian objects, commodities with real economic value, and offered practical, useful advice to aid in commercial expansion.[30] It was to international commerce what a natural history museum is to science. It also popularized the connection of economics and museums, and hinted at exciting new possibilities.

The Director of the Newark Museum from 1909 to 1929, John Cotton Dana saw such possibilities, and wrote of them in a strikingly similar manner to John Woodman

[29] Steven Conn, *Museums and American Intellectual Life, 1876-1926* (Chicago, IL: The University of Chicago Press, 1998), 115.
[30] Conn, *Museums and American Intellectual Life,* 116-118.

Higgins. Dana's philosophies were heavily rooted in the idea that a museum should serve its community and should exhibit objects of everyday utility as an extension of that community's experience. He argued that museums should prepare local industry exhibits, featuring a group of completed objects interesting for their "beauty or complexity, or for the high technical skill of the craftsman who made them."[31] By showing the products of local labor, a museum would celebrate the workings of its community. These ideas were part of Dana's plan for a "New Museum," a different, more usefully-minded, accessible institution than the traditionally imposing, old-style art museums. He argued that oil paintings and other examples of high art were important, but should not trump objects that had a direct bearing on the lives of the museum's supporters. Dana cites the Buffalo Art Gallery and its exhibit, "Art in Everyday Life," to explain that museums should not think of commerce and everyday, useful items as tainted. As Buffalo illustrated, the "useful arts" should be esteemed for their craftsmanship and their importance to the communities that produced them.[32]

Dana's New Museum would showcase industry's historic and cultural development through a chronological progression of objects. Here, artistic quality would be judged by genius, and not material. Museums cannot teach the entire industrial process, but can enlighten visitors through displays of machines, images of the process, and examples of resulting handiwork. Europeans had already caught on to the idea; the British Institute of Industrial Art inspired Dana because it was formed to raise standards of design and workmanship.[33] Austria and Germany supported industrial museums as a

[31] John Cotton Dana, *The New Museum: Selected Writings by John Cotton Dana*, ed. by William A Peniston, (Newark, NJ.: The Newark Museum Association, 1999) 16, 28.
[32] Dana, *The New Museum: Selected Writings by John Cotton Dana*, 55, 78.
[33] Dana, 78-79.

means to take pride in production. Dana believed that if American adults were more pleased with and proud of their industrial achievements, it would inspire children to take an interest in practical trades, to respect manual labor, and to ultimately gain an increased understanding of their community. For American museums, however, the industrial was still generally anathema. A German traveling exhibit featuring fine industrial art applied to the Metropolitan Museum of Art and was rejected because the Met did not want to associate with anything commercial.[34]

Dana fought for his New Museum idea despite overwhelming resistance from traditional museums. His writings drew upon the Philadelphia Commercial Museum for support, as well as the Cleveland Art Museum's attempts to collect and display objects relating to Cleveland industry. In 1903 he tried to establish a "Museum of Local Industries" but was unable to secure funding.[35] He was ahead of his time, and struggled to convince the museum community that objects of utility had value. Though there is no evidence that John Woodman Higgins read Dana's work, his museum featuring the chronological progression of steel craftsmanship, complete with the products of WPS and a factory tour, echoed Dana's sentiments.

Higgins conceived of his Armory as an industrial museum that could depict the evolution of metalworking. It was designed to be a hands-on experience involving steel objects of all types and time periods. The museum encompassed both Higgins' firm belief in the importance of industry and his passion for craftsmanship, creating an institution where understanding the steel industry's past was integral to its future success. As with Dana's concept, the Armory was closely linked to the Worcester community.

[34] Dana, 110.
[35] Dana, 111.

Higgins practiced extreme openness and encouraged visitors to handle or touch any object for the ultimate experience of public engagement. Shortly after the museum opened, Higgins began planning for a blacksmith's workshop in the garage next to the museum, complete with tools young visitors would require to create their own suits of armor out of tin cans. He strongly believed in the relevance and artistic beauty of practical craftsmanship and wanted his museum to be an inspiration for steel workers, the Worcester community and the industrial world. [36]

The innovative attitude of the Higgins Armory Museum and its benefits to the city of Worcester were not enough to hold off the effects of the Steel Industry's changing economics. Foreign companies had been poised for their opportunity to compete in American markets, and after 1958 they got their chance. In the years from 1950 to 1958, steel imports were at an all-time low of less than 1.5 million tons. Only a year later, they jumped to 4.4 million, and would continue to rise.[37]

[36] *John Woodman Higgins and the Higgins Armory Museum*, 16.
[37] Robert W. Crandall, *The U.S. Steel Industry in Recurrent Crisis*, (Washington, DC.: The Brookings Institute, 1981), 22.

Chapter 4: The Decline of American Steel

The three main reasons for the decline of the United State's position in steel markets were raw material prices, shipping costs and new technologies. Japanese companies adopted new steel making technologies including the basic oxygen furnace, the furthered blast furnace, and continuous casting methods that increased labor productivity in a location with relatively low wage-rates. They also pioneered computer-controlled steel pouring, forming, and rolling, increasing the possible yield of finished products from raw steel. The international market also offered access to cheaper raw materials, and this, combined with rising costs of shipping, hurt the U.S. industry by limiting exports of materials and finished products, subsequently driving down profits at the same time that foreign companies were increasing economic efficiency. [38]
Steel profits plummeted in the 1960's; American steel companies' rate of return was twenty five percent below the average U.S. manufacturing industry.[39]

This dramatic shift hit Worcester's steel companies hard. The loss of war-time demand combined with international competition caused the Royal Worcester Corset Company to close in 1950, the innovative American Steel and Wire to close its doors in 1958, and Pullman Standard to follow in 1960. Thousands of local workers lost their

[38]In the 1950's, U.S. steel pricing was not related to demand conditions, a factor that changed dramatically in response to international competition. Instead of calculating prices by demand, American Steel started with a target-return pricing policy, meaning that prices were calculated so that companies received a decided-upon amount of return profits, a system more based on production costs than competition. Price markups rose slowly, despite the industry's booming business. With the influx of imports after 1958, steel companies needed to adjust profit margins, changing prices to reflect demand conditions and compete within the newly challenging steel market. For more information about the economics behind the Steel Industry's decline, see Robert A. Blecker, "Markup Pricing, Import Competition, and the Decline of the America Steel Industry," *Journal of Post Keynesian Economics* 12, no. 1 (1989): 70-87.
[39] Crandall, *The U.S. Steel Industry in Recurrent Crisis*, 16, 22.

jobs.[40] Worcester Pressed Steel and its affiliated museum strongly felt the effects of industrial decline. The 1960's brought economic turmoil to the Higgins Armory, PRESTEEL, and the city of Worcester, and forced all three to either evolve or succumb to de-industrializing trends.

[40] Chaim M. Rosenberg, *Goods for Sale: Products and Advertising in the Massachusetts Industrial Age* (USA: University of Massachusetts Press, 2007), 164.

Chapter 5: 1960's Transitions

John Woodman Higgins died in 1961, and with him went the energetic force that had created the museum and sustained it through trying times. Without the surety of Higgins' vision, the museum spent the 1960's grappling for a direction. Despite its founder's passing, the Armory's attendance increased by thousands of visitors each year, inspiring growth in its staff and operating costs. Costs, the slow decline of PRESTEEL and the necessities of object conservation forced the modernization of museum policies and the Armory's first steps towards creating an identity as an independent institution. The Board of Directors, comprised of Higgins' family and original supporters, began the modernizing process by creating a formal collecting and deaccessioning policy, limiting the connection to PRESTEEL, and charging for admission.

John Woodman Higgins created the museum from his extensive private collection of arms and armor and personally handled new acquisitions. This arrangement stalled the creation of any official guidelines for the collection or deacessioning of objects. Prior to John Woodman Higgins' death, deaccessioning records listed all items removed from the collection as "discarded." Museum executives set groundwork for dealing with objects apart from Higgins' private collecting by creating an Acquisition Fund, and requested that all moneys made through their new, formalized deaccessioning system be used to

support the fund. In 1963, board members also revoked Higgins' public hands-on policy to preserve the armor.[41]

After Higgins' death, the museum continued to support its connection to PRESTEEL, though public tours and entrance through the museum stopped in 1962 due to "stones being thrown into the machines and the stealing of WPS ideas."[42] The Armory was still a company museum, and announced its connection to PRESTEEL in its entryway, but growth made Higgins' original vision unwieldy. To pay operating costs and taxes, the museum charged an admissions fee for the first time in its history, fifty cents for adults and ten for children.

Such changes indicated a shift in executive focus. By charging admission, shutting down factory tours and restricting public access to objects, the museum signaled its new direction as a collecting institution with a purpose apart from WPS's showroom. Executives asserted that the Armory's main strength lay in its objects rather than its community and industry connections, and were willing to restrict community access to further their new direction: the success of the Higgins Armory Museum as a repository for Higgins' collection.

Though the museum shifted away from direct community interaction, Worcester Pressed Steel maintained an active presence in the museum until the 1970's. Executive Committee members considered the inclusion of a PRESTEEL display area adjoining the Modern Wing and discussed using the museum to promote PRESTEEL products. The

[41] Higgins Armory Museum Deacessioning Log, 1961, Higgins Armory Museum Archive, Worcester, MA, accessed 2012; Higgins Armory Museum Trustees' Meeting Minutes, 1969, Higgins Armory Museum Archive, Worcester, MA, accessed 2012; *Important Yearly Events Outlined, 1963,* compiled by Mary Louise Wilding-White, Higgins Armory Museum Archive. Worcester, MA, accessed 2012.
[42] *John Woodman Higgins and the Higgins Armory Museum*; 21; *Important Yearly Events Outlined,* Mary Louise Higgins Wilding-White.

Modern Wing's renovation was a top priority in committee meetings; members wanted to further Higgins' idea of steel craftsmanship and advocated for the accession of items of contemporary interest. Committee members proposed exhibits on missiles or jets, EBCOR boiler technologies, and military items such as bulletproof vests used in Vietnam. In 1967 and 1968 museum leaders saw the Armory as a presenter of new technologies, and wanted to renovate the Modern Wing to be an outlet for forward thinking.[43] Higgins' company museum had been innovative, and through presenting new technologies the museum could continue the tradition and keep itself at the forefront of American industry.[44]

[43] Higgins Armory Museum Executive Committee Meeting Minutes, June 6, 1967, Higgins Armory Museum Archive, Worcester, MA, accessed 2012; Higgins Armory Museum Executive Committee Meeting Minutes, October 8, 1968.

[44] When considering the renovation of the Modern Wing, Executive Committee Members in 1968 cited the following quote by John Woodman Higgins to guide their exhibit direction. "This Modern Wing is devoted to machine-made products—crowning examples of mass production, such as automobile and airplane equipment, household utensils, etc.—ninety per cent pressed steel. Showcases display various cold-rolled, forged, stamped, and deep-drawn parts, with labels from American and foreign mills….All these metal products of man's brains and hands, adopted for our use, demonstrate the progress of evolution…. What achievement records better and more truthfully man's progress in living, serving, cooperating, and attaining higher standards for peace, satisfaction, and happiness in our free American enterprise system?" The Modern Wing renovation would continue to stress art in industry in keeping with the Higgins' vision. Higgins Armory Museum Trustees' Meeting Minutes, November 20, 1968.

Chapter 6: Struggles for Survival

Despite support from the Higgins Armory Museum, Worcester Pressed Steel struggled financially in 1970. It had outlasted the American Steel and Wire Company, Pullman Standard, and the Royal Worcester Corset Company, but was not strong enough to counter the city's gradual deindustrialization following World War II. The Armory's financial records indicate that PRESTEEL was delinquent on rent payments for its office space within the museum.[45] The museum had its own financial problems that year resulting from low attendance numbers. In a meeting to evaluate the situation, a trustee attributed the serious drop in numbers to the "economic change in the country." He noted that many museums with admissions fees had experienced a similar crunch.[46]

Lack of incoming funds forced the museum to postpone its plans for the Modern Wing and reevaluate their resources. In 1970, the collection's worth was estimated at $841, 756. Armor and medieval weaponry formed the bulk of the collection; modern pieces only generated $43, 280.[47]

Given the strength of the museum's collection and its tenuous relationship with Worcester Pressed Steel, in September of 1970 executives discussed replacing the WPS display with "more appropriate displays," including more Crusader history and educational interactives.[48] Director George Gage's Report proposed the question "What

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[45] J*ohn Woodman Higgins Armory Inventory Report, March 17, 1970,* Higgins Armory Museum Archive, Worcester, MA, accessed 2012.
[46] *John Woodman Higgins Armory Annual Attendance Report, 1969-1971,* Higgins Armory Museum Archive, Worcester, MA, accessed 2012.
[47] *John Woodman Higgins Armory Inventory Report, 1970*.

kind of museum are we?" and his response showed a distinct directional shift away from the Armory's founding status as the Steel Museum.

> We are known throughout the museum world as a museum of arms and armor. Most literature concerning this museum, written by freelance writers, refers to the Armory as a museum of arms and armor. Such descriptive phrases resolve the question in anyone's mind as to the museum's content. Therefore, any connotation that we are an armory of modern day weapons is dispelled.[49]

Gage used the collection as a focal point around which he hoped to refocus the museum's primary purpose. His statement also hinted at a lack of public interest in the museum's industrial side. The rest of the Executive Committee supported his ideas, and by the end of the year all items of modern workmanship disappeared from the East Wing to be replaced with an exhibit of chain mail, a horse mounted crusader, an improved display of some armor that was already on exhibit, and a larger collection of 19th century weaponry.[50]

All items not in keeping with the Higgins Armory's new philosophy were deaccessioned, returned to their former owners, or placed in basement storage. Trustees approved the sale of all modern items in storage, forbidding only the sale of armor because of its possible future uses. The large-scale removal of modern items expressed the sincerity and longevity of the Armory's new direction. Moving forward, there would be no need for WPS products, a replica Piper Cub airplane, or modern military hardware.[51]

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[48]*Tentative Plan for Conversion of the Modern Wing of the Museum, Rough Draft, September 27, 1970*., Higgins Armory Museum Archive, Worcester, MA, accessed 2012.
[49]Higgins Armory Museum Director's Report, November 17, 1970, Higgins Armory Museum Archive, Worcester, MA, accessed 2012.
[50] Higgins Armory Museum Annual Report, 1970, Higgins Armory Museum Archive, Worcester, MA, accessed 2012; *John Woodman Higgins and the Higgins Armory Museum*, 22.
[51] Higgins Armory Museum Trustees' Meeting Minutes, November 17, 1970.

Figure 6.1: Since 1971 half of the Great Hall has been devoted to additional armor displays.[52]

John Woodman Higgins' daughter Mary Louise Wilding-White served as President of the museum's Executive Committee, and was one of the only opponents to the drastic changes. She stressed Higgins' desire to showcase the art of metal working through time, a founding purpose that 1970s executives abandoned by removing examples of modern industry.[53] By breaking its connection with PRESTEEL and deaccessioning its industrial objects, the museum no longer displayed Worcester's past

[52] "Higgins Armory Museum," Mojo Pages.com, copyright 2006-2013, http://www.mojopages.com/biz/indian-lake-east-ma-higgins-armory-museum-3984810.
[53] Mary Louise Wilding-White, Higgins Armory Museum President's Annual Report, April 25, 1972, Higgins Armory Museum Archive, Worcester, MA, accessed 2012.

and present. It asserted itself as an arms and armor museum whose objects were for the benefit of Worcester's population, but not derived from it. Two years after the directional switch, Roe Corporation purchased Worcester Pressed Steel from the Higgins family at a drastically reduced rate. The newly empowered Armory also solidified its new relationship with its former partner by drafting a tenant's agreement. It asserted the museum's ownership of the building and established WPS as a tenant on the two lower floors. PRESTEEL was responsible for rent and continued maintenance costs.[54]

[54] *John Woodman Higgins and the Higgins Armory Museum*, 22.

Chapter 7: Reinvention for Worcester and the Higgins Armory

The Higgins Armory Museum and Worcester Pressed Steel continued their tenuous relationship until 1974, when the severity of PRESTEEL's financial situation became apparent. President Mary Louis Wilding-White wrote that she regretted selling Worcester Pressed Steel in 1972, but government pressure restricted her from running a charity and a paying company together. She noted that her father would have wanted the two institutions to remain together to showcase modern steel alongside old steel craftsmanship, but WPS had fallen on severely hard times. The company owed the museum $10, 500, and would continue to strain Higgins' other beloved creation. The museum needed its independence to survive.[55] Executives requested WPS's official departure in 1974, and granted their employees only temporary access to the museum's bathrooms until December of that year.[56] Upon PRESTEEL's departure, the Higgins Armory sued for and won $10,000 from the struggling steel company to pay for damages to the museum building during its tenancy. Shortly after, Worcester Pressed Steel officially closed. An involuntary bankruptcy petition was filed against the company in August of 1975, followed by an auction of its equipment and machinery. Maine's Pressed Steel of Portland closed that same year.[57]

The Canal National Bank from Portland, ME purchased the remainder of WPS for $20,000 at a public auction. Rumors circulated that the Armory would be closing as well,

[55] Wilding-White, Higgins Armory Museum President's Annual Report, May 3, 1977.
[56] Higgins Armory Museum Executive Committee Meeting Minutes, October 15, 1974; Executive Committee Meeting Minutes, November 19, 1974.
[57] Higgins Armory Museum Executive Committee Meeting Minutes, July 22, 1975; "Pressed Steel Co. Building is Sold," *The Worcester Evening Gazette*, Friday, April 9, 1976.

but Director George Gage reported to local media outlets that the closing and sale of their industrial arm would have absolutely no effect on the museum. Although the properties share the same industrial complex, Gage asserted that the museum owned its own building and was a fully-functioning institution in its own right. That same year, the Higgins Armory began a membership drive to promote its position as a publicly-funded institution.[58]

The museum executives' decisions to separate it from WPS, remove the Modern Wing, and prioritize arms and armor laid the foundation for a new identity. The museum could be marketed as an institution of national or even worldwide importance rather than one that succeeded through local connections. In keeping with this identity, the Armory applied for and received accreditation in 1972 from the American Association of Museums, now the American Alliance of Museums. President Wilding-White also worked to forge connections with major arms and armor exhibitors. She wanted the museum to create a new identity alongside the collections of the Metropolitan Museum of Art, the Philadelphia Museum of Art, the Art Institute of Chicago, and the Cleveland Museum of Art. Such powerful arms and armor collections could offer advice and guide the Higgins to its desired place as an internationally-recognized arms and armor museum.[59] In the 1976 President's Report, Wilding-White wrote that staff kept busy searching for new ways to maintain public interest and generate revenue, including testing out innovative exhibition strategies. She discussed their success exhibiting active conservation, and mentioned her desire to better understand visitor motivations. Staff efforts seemed to be paying off; attendance number rose modestly and Wilding –White

[58] "Pressed Steel Co. Building is Sold," *The Worcester Evening Gazette*; *John Woodman Higgins and the Higgins Armory Museum*, 22.
[59] Higgins Armory Museum 1972 Annual Report, May 9, 1973.

wrote that the museum was "becoming better and better known. More people are realizing our worth!" Marketing adjustments and fundraising plans occupied the majority of staff time during this post-WPS period.[60]

The city of Worcester was also in need of a reinvention. Its high unemployment rates, skilled workforce, and vacated industrial spaces provided an ideal atmosphere for the technology market. Government contractors, university-associated research firms, and venture capitalists purchased the cheap remains of Worcester industry in the name of high-technology. Such an industry required significant human effort and few raw materials, an ideal arrangement for a city that had lost steel and textile businesses due to raw material competition. The low cost of labor in Massachusetts was additionally appealing. Massachusetts industrial cities contained more workers in electronics than in textiles for the first time in 1977, and between 1979 and 1983, high-tech and service industries accounted for 97.6 of all jobs created. Research and development firms needed large amounts of inexpensive space in close proximity to research universities, and Worcester had an abundance of empty industrial property. In their book, *Massachusetts: a Concise History*, Richard D. Brown and Jack Tager noted that the transition to high-technology industries was only possible because of Massachusetts' industrial past. Worcester machinists and metal workers had been developing technical skills and innovating since the 19th century; John Woodman Higgins was a prime example.

Technological companies had talented pool of available workers to draw from and space to develop in Worcester, allowing the city to successfully trade one technical identity for another.[61]

[60] Wilding-White, Higgins Armory Museum President's Annual Report, April 13, 1976.

Chapter 8: After PRESTEEL- Planning for a Sustainable Future

The Armory Museum's identity shift and divorce from Worcester industry did not bring the success that museum executives had hoped for. After an initial influx of visitors to see the museum's changes, attendance and available funds dropped. John Woodman Higgins had provided for the museum to receive funding from his estate for years following his death, but that money was not enough to sustain it. His children, Mary Louis Wilding-White and Bradley Higgins, remained involved with the museum and assisted with funding issues, but could not support the struggling museum forever. Without the connected income source of PRESTEEL, the museum needed an endowment and increased attendance, and both posed problems.

In 1978, the museum's Incorporators met to brainstorm funding possibilities. Their meeting, "John Woodman Higgins Armory Alternatives," illustrated the severity of the museum's situation. Some proposed "weeding-out" surplus objects or low-quality reproductions and selling them at public auction. Another idea came from Ronald Lauder, the philanthropist son of Estee' Lauder. Lauder offered to purchase the very best of the Armory's collection, and when trustees refused, amended his offer to include the entire collection, all for the purpose of obtaining the rarest pieces. Trustees approached the offers as complimentary, but both received no serious consideration.[62] The following year, Trustees discussed what their goals for the museum would be if given large amounts of money. Would they be willing to add another person's name to the museum?

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[61]Richard D. Brown and Jack Tager, *Massachusetts: A Concise History (*USA: University of Massachusetts Press, 2000), 275-286.
[62] Higgins Armory Museum Director's Annual Report, 1978.

Would they be willing to part with two important suits to raise the money? Another offer of $10 million from Ronald Lauder prompted these questions. He followed it up with a different offer of $100,000 to purchase two suits of armor of his choosing. Again, the Board of Trustees unanimously voted not to sell, because "the board is not in a position to act at the present time."[63] Their consideration of Lauder's second round of requests, however, illustrates the museum's desperate situation.

With no other offers for major funding, the museum was forced to address its low attendance problem. Worcester Pressed Steel's closing surrounded the museum with vacated industrial buildings. What had once been a productive and frequented corner of the city had turned empty, and apart from the museum itself, there was nothing bringing traffic into the vicinity. Executives also noted the lack of a parking lot and the specialized nature of the exhibits as possible visitor detriments.[64] By choosing to focus only on the strength of their collection, museum leaders had limited their mass appeal. This selectivity could be turned into a strength if the museum became nationally recognized for its arms and armor, but that had yet to fully develop.

The same issues that kept attendance levels low also hindered endowment-strengthening donations, which were necessary to support the museum into the future and to take care of pressing maintenance issues such as a damaged roof and high heating costs. Bradley Higgins proposed restructuring the area around the museum to mimic Connecticut's Mystic Seaport Museum. A museum village with shops, trade

[63] Higgins Armory Museum Trustees' Meeting Minutes, January 16, 1979; Trustees' Meeting Minutes, June 19th, 1979.
[64]Higgins Armory Museum Executive Committee Meeting Minutes, August 1, 1978.

demonstrations, and tours might entice tourists to travel to its increasingly-remote section of Worcester. Another option was a merger with a more heavily-trafficked, better-endowed institution, the Worcester Art Museum.[65]

[65] Executive Committee Meeting Minutes, August 15, 1978.

Chapter 9: The Worcester Art Museum Debates

The Worcester Art Museum opened in 1898 and maintained a considerable endowment due to a bequest from its founder, Stephen Salisbury III. It operated on an international scale from its inception, and was one of the first American museums to purchase works from artists Claude Monet and Paul Gauguin. It was also the first to transport a medieval building from Europe and successfully reinstall it. The Worcester Art Museum had forged a close relationship with other renowned art museums, and worked with them in the early 1930's to discover and extricate intricate floor mosaics at the Antioch archeological site in Turkey. Such acquisitions and public achievements helped the Worcester Art Museum (WAM) to become the second largest museum of fine art in the New England area, and possibly a powerful ally for the Higgins Armory Museum.[66]

Armory Museum trustees held a special meeting on March 13, 1979 to discuss a merger with the Worcester Art Museum. Due to increasing costs and to avoid consuming the rest of its endowment, the museum "must either close, severely cut costs back, or merge." Higgins' children were adamant about their father's collection remaining whole and preferably in its original location, so all discussions of the merger progressed tentatively to avoid conflict.[67] In the event of a merger, the Armory could not afford the

[66] "Massachusetts Museums Offer Art, Science," *Daily Gazette*, Friday, June 13, 2003, pg 50; "Salisbury's Bequests," *New York Times*, November 21, 1905, http://query.nytimes.com/mem/archive-free/pdf?res=FB0617FF3F5911738DDDA80A94D9415B858CF1D3; "Worcester Art Museum," Traditional Fine Arts Organization, Inc., 2009, http://tfaoi.org/newsmu/nmus52.htm.
[67] Higgins Armory Museum Trustees' Meeting Minutes, March 13, 1979.

cost of a new building, nor did staff want their collection to disappear seamlessly into WAM's existing exhibits. Trustees saw the benefit of the Art Museum's financial stability and the potential for its popularity to draw more visitors to experience the armor, but wanted to move forward only if WAM agreed to assist with the cost of a new, specialized space for the Higgins collection. Bradley Higgins expressed his lack of support even at this early juncture, arguing that future exhibit space and the collections' growth and continued representation would not be guaranteed if control transferred to the art museum. Those with the Armory's best interests in mind would no longer control its future, a frightening idea for the Higgins heirs, who argued for full autonomy to ensure the collection's future dynamism. [68]

Despite Higgins' protests, trustees consulted architect Jean Paul Carlhian about the possibilities for a future building. He expressed initial trepidation. Carlhian came from a historic preservation background, and noted the unique qualities of the original building: it bore the imprint of the institution's founder and his goals. Carlhian argued that when one entered the space, one immediately felt transported; the building was as much a part of the collection as the objects. It created an atmosphere that should not be overlooked if trustees moved forward with a new space. Carlhian compared the Higgins' display techniques with the armor exhibited at the Metropolitan Museum of Art, noting the differences in the two museum's interpretive strategies. The Met presented its objects from an artistic perspective, and its building inspired feelings similar to an art gallery or an antique shop. The Armory attempted to create a more immersive, interactive experience, and through that, teach about historic progression. Such ideas would be integral to the design of a new space, and Carlhian suggested that a new location should

[68] Trustees' Meeting Minutes, March 13, 1979.

include arches and vaulted ceilings and attempt to keep the collection together in a single space. If a similar space could be created, the museum would also benefit from a shared gift shop, a common registrar for shipping and receiving, and shared security.[69]

Discussions also included questions about how much of the collection could transfer, if any needed to be sold, and if it could remain in chronological order in the new location. A representative from WAM argued for the unlimited flexibility of the merger, but suggested that paintings and similar non-armor objects could be integrated into the museum's existing collection, while the best armor would have its own exhibition space and rotate. Trustees attending voted six to two in favor of approving the merger; two votes abstained until the WAM could guarantee of a satisfactory new space with room to exhibit all armor that was currently on display.[70]

Despite the approved vote, Mary Louis Wilding-White wrote to Harry B. Dewey, president of the Worcester Art Museum, to stall the merger. She asked for a temporary agreement or a limited commitment, to which Dewey wrote,

> How can the Worcester Art Museum bear the responsibility for creating a building at a cost in excess of $1 million to house the Higgins Armory, a building which would of necessity conform to the special requirements for the display of armor, with the possibility that after ten years the Armory would abandon the WAM and leave us with the very expensive and not easily adaptable building? It would seem to me that we would be constructing a castle on a very sandy foundation and I don't see how this would be of benefit to either institution.[71]

They continued their correspondence as Wilding-White looked for ways to insure the safety of her father's collection and Dewey attempted to negotiate for the heirs' support.

[69] Trustees' Meeting Minutes, April 17, 1979.
[70] Trustees' Meeting Minutes, April 17, 1979.
[71] Harry B. Dewey. letter to Mary Louis Wilding-White, May 11, 1979, Higgins Armory Museum Archive, Worcester, MA, accessed 2012.

It was not forthcoming. Mary Louis Wilding-White stepped down from the Board of Trustees in June of 1979. She would continue her annual donations to the museum, which would be maintained for ten years following her death. Her resignation letter, though politely worded, contained slightly veiled anger about the Trustees lack of trust in the collection and in Higgins' original vision. She wrote, "This museum can and will last as an individual entity. Will the trustees accept this? My children do."[72]

The conflict over the WAM merger did not stop with Higgins' daughter. Bradley Higgins expressed his extreme disappointment about the plan, one that he felt demonstrated a lack of gratitude for the Higgins heirs' efforts to keep their museum afloat. He cited his time as an incorporator, as Chairman, his donations, his purchase of a parking lot, and his work to help the museum go public so that it could qualify for grant funding. "There is and never was any intent to lessen my financial support," he wrote, "In fact, last April I offered a substantial pledge to cover the ten-year strain on the endowment." Both he and Wilding-White felt the museum could move forward without a merger, and stressed their willingness and commitment to help it do so. However, when the merger seemed inevitable, Bradley Higgins resigned as Chairman, claiming the strain was too difficult. He also threatened the withdrawal of his financial support should the merger come to pass. Wilding- White stressed her independence in her own retirement letter, writing that though she felt a similar disappointment, she was separate from her brother, and would continue her financial support.[73]

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[72] Mary Louis Wilding-White, letter to the Higgins Armory Museum Board of Trustees, June 19, 1979, Higgins Armory Museum Archive, Worcester, MA, accessed 2012.
[73] Bradley Higgins, letter to the Higgins Armory Museum Board of Trustees, June 19, 1979, Higgins Armory Museum Archive, Worcester, MA, accessed 2012; Mary Louis Wilding-White, letter to the Higgins Armory Museum Board of Trustees, 1979.

The Higgins children's emotionally-charged language made a high level impact. In an Incorporator's meeting that year, thirty-nine votes opposed the merger, twenty-four voted in its favor. This result negated the Trustees' decision and ensured the Armory's independence, though its management faced the future with divided opinions. In her final report as President, Wilding-White called the merger the "Great Challenge of 1979," and describes the ultimate decision triumphantly. The Higgins Armory Museum would move forward independently and would continue to present itself as the best museum of strictly arms and armor in the western hemisphere. Staff hopped this would be enough, and that the museum could develop into a self-sustaining institution with a long-term future.[74]

[74] Mary Louis Wilding-White, *Retired President's Report, the Great Challenge of 1979*, Higgins Armory Museum Archive, Worcester, MA, accessed 2012.

Chapter 10: Moving Forward Independently

Two years later, Director Warren M. Little wrote about the twenty years since John Woodman Higgins' passing, claiming that with the loss of both its founder and PRESTEEL, the museum inevitably lost its early emphasis on metalwork and craftsmanship. The Modern Wing was dismantled, and the Armory's principle image centered around its exceptional collection of arms and armor. Little argued that there were advantages and disadvantages to being unique, and in doing so he echoed past debates over low attendance numbers. Having a narrow subject matter made it easier to develop a cohesive interpretive plan, but it also limited the potential audience to arms and armor enthusiasts. Moving forward, Little stressed that his goal as Director would be to attract new audiences. He planned to delve deeper into armor's protective role to make connections with modern forms of protection and wanted to explore methods to make medieval history relatable.[75] These goals hinted at the museum's continued struggle to draw in visitors despite its grand marketing claims. The Director worked to further the museum's image as a powerhouse of Western armor by bringing in Walter J. Karcheski, a Worcester native and an arms and armor specialist. In the 1980's, Karcheski was working with the Tower of London to identify items in its collection. His work researching and developing a cataloging system for the Higgins collection established its

[75] Warren M. Little, Higgins Armory Museum Director's Annual Report, January 12, 1981.

international importance and enhanced the credibility of the Armory Museum's image. Despite these efforts, the Higgins Armory struggled financially and did not begin acquiring items as a public museum until 1996. [76]

[76] Little, Higgins Armory Museum Director's Annual Report, 1981.

Chapter 11: The Present and Future Armory

The modern Higgins Armory Museum is dealing with many of the same issues that inspired merger discussions in the 1980s. Their endowment is perilously low for a functioning museum at approximately $2.9 million. Acquisitions are infrequent, with the bulk of staff's collections management efforts going into streamlining and removing poor quality items. Christie's, Sotheby's and Skinner auction companies have sold deaccessioned Higgins pieces in the last twenty years, sometimes on multiple occasions.

The Higgins Armory Museum is still struggling with its brand. A collection of world-wide importance that is rarely recognized outside of Massachusetts, John Woodman Higgins' objects are having a hard time transcending their original purpose as part of a chronology of steel craftsmanship. The Armory began as an industrial museum that was closely connected to Worcester's economy; it showcased the products of Worcester tradesmen. Without Worcester Pressed Steel, it lost its primary source of income and fame. Without its factories, the city of Worcester also lost its income and its identity. Technology and medicine reinvigorated Worcester, but focusing strictly on armor has yet to do that for the Higgins Armory Museum. It has no community connection; there is nothing that links the museum to Worcester, including its objects. It is a foreign museum stranded in a quiet corner of an industrial city, not famous enough to gain outside recognition.

To combat their lack of community affiliation, the Armory's employees have maintained John Woodman Higgins' innovative reputation. The staff accomplishes a

great deal on low budgets. Higgins community programming brings in nearly as many visitors as the armor and events are often constructed with volunteer effort, handmade extras, and creativity. The museum's staff also draws heavily from modern museum theory and actively works towards increasing visitor engagement through contextualized, interactive exhibits.

Figure 11.1: Creative programs attempt to make armor relevant to modern visitors.[77]

This forward-thinking interpretation has helped the museum boost its 21st century attendance numbers, but such success has only prolonged the inevitable. The Armory's

[77] "Photos," Higgins Armory Museum Facebook Page, November 21, 2011, accessed October 2013, https://www.facebook.com/photo.php?fbid=10150429750392107&set=pb.22382377106.-2207520000.1381689701.&type=3&theater.

low endowment cannot sustain any future profit deficit. The sustainability debates of the 1980's have returned and this time drastic actions will need to be taken to preserve John Woodman Higgins' collection for future generations.

Chapter 12: Update- The 2014 Merger with the Worcester Arts Museum

The Higgins Armory Museum closes the doors of its historic building permanently on December 31st, 2013. The collection will reappear within the Worcester Art Museum in March of 2014 as the two institutions merge for mutual support.

Susan Maas, from the consulting firm Leadership Transitions, joined the Higgins staff as Interim Executive Director in July of 2010 and with Trustee support, concluded that the museum did not have a sufficient endowment to be sustainable. Maas noted that the Higgins went from an endowment of $17 million to the current $2.9 million, and has an annual operating deficit of $350,000 to $400,000, mostly resulting from building maintenance costs. Sales and donations could not fend off the diminishing endowment, and Maas broke the news to the Higgins Board of Trustees in 2011 that the museum was not sustainable.[78]

Since then, the Board has renewed conversations with the Worcester Art Museum, and its $92 million endowment, about a potential merger. Though still pending the approval of the Massachusetts Attorney General, both institutions have agreed to proceed with the merger starting in 2014. James Donnelly Jr., a trustee and Higgins' president since 2009, explained the decision by echoing Maas's views: "The trustees' decision to transfer the collection is driven by the inescapable reality that excellent programs and strong attendance alone, without a significant endowment, cannot sustain

[78] "Integration with Worcester Art Museum," The Higgins Armory Museum, accessed October 2013, http://www.higgins.org/integration-worcester-art-museum; Richard Duckett, "Higgins Armory Museum to Close After 82 Years," *The Worcester Telegram*, March 7, 2013, http://www.telegram.com/article/20130307/NEWS/130309688/0.

the Higgins Armory as an independent institution. Combining with the Worcester Art Museum will keep this tremendous asset for the community and preserve John Woodman Higgins' legacy for generations to come." The Armory's curator, Dr. Jeffrey Forgeng, also supported the merger, stating that something drastic was necessary to save the museum's collection from being dissolved.[79]

Forgeng explained that due to the hasty nature of the merger, only broad topical concepts have been decided for the new WAM installation. As part of the negotiations, the art museum agreed to further development of the Higgins collection, continue scholarship, and keep its content dynamic and relevant. WAM's director Matthias Waschek presented a multi-year combination of traditional display and open storage that would ultimately put the entirety of the Higgins collection on public display. The initial 2014 exhibit, to be called *Knights!,* will feature works from both the Higgins and WAM collections. *Knights!* will display arms and armor through temporal and cultural methods as well as storytelling, and will feature innovative and experimental programming for families. Waschek has set aside 2015 to 2017 for behind-the-scenes preparation of the permanent galleries, claiming that by 2018 some of the art museum's existing galleries will be transformed into a soaring, multi-level gallery specifically for Higgins pieces and WAM's associated objects. The permanent arms and armor gallery, which should be completed no later that 2019, will feature 4,000 square feet of galleries on two floors,

[79] Jeffrey Forgeng, Paul S. Morgan Curator, telephone interview author, October 9, 2013; A Renaissance for the Higgins at WAM, Worcester Art Museum, accessed October 2013, http://www.worcesterart.org/Director/higgins-collection/index.html.

including a Grand Hall on the upper level and condensed, open storage display on the lower level.[80]

Once strongly contested, a merger with the Worcester Art Museum now seems to meet with tentative enthusiasm. Without Higgins' heirs to voice their protests or offer financial support, the trustees had no other options to preserve the integrity of the collection. James Donnelly explained that the museum's principle donors did not want to continue paying for deficits with no long-term solution to the endowment crisis, and could not raise enough money to give the museum an independent future. Susan Maas estimated that the Higgins Armory would need an endowment of around $15 million to feel secure, and had no more than three years until deficits exhausted the remaining endowment.[81]

Despite the resigned nature of the merger, it will not come without major losses to the Armory. The building, as much a part of the collection as the objects, has an uncertain future. Curator Jeffrey Forgeng hopes its historic integrity will be preserved by its new owners, but negotiations have not begun with perspective buyers. The positions of Higgins' nine full-time and nineteen part-time staff members are also unclear. The curatorial staff will have projects to complete well into 2014 to facilitate the interpretive transfer, but the large and active Education Department does not have that reassurance. Forgeng hopes that WAM executives will recognize the valuable, innovative nature of the staff's interactions; he and Education Director Devon Kurtz spoke at the 2012 North Eastern Museum Association Conference about the value of Education and Curatorial

[80] Forgeng, telephone interview with author; A Renaissance for the Higgins at WAM, Worcester Art Museum.
[81] Gareth Harris, "Massachusetts Museum Merger Draws Fire from the Art Community," *The Art Newspaper,* March 22, 2013, http://www.theartnewspaper.com/articles/Massachusetts-museum-merger-draws-fire-from-art-community/29125; Duckett, "Higgins Armory Museum to Close After 82 Years."

departments working together. Called "Cats and Dogs Living Together," the talk espoused the importance of both departments working as a team to create accessible, engaging exhibits. This teamwork was key to Higgins' interactive, culturally-contextual exhibits, and it would benefit the more traditional WAM to incorporate Higgins' strategies and forward-thinking staff.[82]

Susan Maas and WAM Director Matthias Waschek share similar opinions that integrating the Higgins collection and dynamic approach with the Worcester Art Museum would be transformative, broadening WAM's appeal and allowing the Higgins collection to benefit from interaction with a larger range of culturally- relevant objects. Education Director Devon Kurtz agreed in an interview with the *Worcester Telegram and Gazette*, saying that combining the collections would enhance the interpretation of Higgins' objects.

> When you look at the Japanese conch shell helmet, that will be surrounded by Japanese artwork, so you will be telling a much greater story, a much richer story… It's not just going to be putting the suits of armor on display, you will be able to see knights clanking in the halls of the Worcester Art Museum. [83]

The merger would expose WAM to new audience groups, particularly children and families, and increase the art museum's prestige with an arms and armor collection second only to the Metropolitan Museum of Art in America. The merger is also an opportunity for the Worcester Art Museum to be at the forefront of museum theory. If Waschek proceeds as planned and expands on Higgins' contextual, interactive approach, it would shift the art museum from a highly traditional, tombstone label format to one

[82] Forgeng, telephone interview with author; Conversations between Kary Pardy and Higgins Armory Museum Education Director Devon Kurtz, Summer 2012.
[83] Tom Rettig, "Higgins Armory Museum to Close," *Telegram and Gazette, telegram.com*, via *YouTub*e, March 8, 2013, accessed October 2013, http://www.youtube.com/watch?v=Ek31c_F0hys.

that draws cultural connections and encourages visitor participation. Such a transformation would be mutually beneficial. By embracing a forward-thinking interpretive strategy, the Worcester Art Museum would jointly increase attendance and prestige, insuring the protection of John Woodman Higgins' collection and perpetuating his legacy of innovation.[84]

[84]Duckett, "Higgins Armory Museum to Close After 82 Years;" Forgeng, telephone interview with author; A Renaissance for the Higgins at WAM, Worcester Art Museum; "Integration with Worcester Art Museum," The Higgins Armory Museum.

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