

# MATERIAL CULTURE

## THE TRANSFORMATION OF A NEW ENGLAND COTTON MILL INTO A CENTRE FOR LEARNING AND CULTURAL PRESERVATION

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## Abstract

This paper examines the Boott Cotton Mill in Lowell, Massachusetts, tracing its evolution from a major textile manufacturing hub in the 19th century to its current status as a Museum and educational centre within the Lowell National Historic Park. Initially a pivotal player in the global cotton industry, the mill was integral to New England's economic growth, contributing significantly to American industrialization. However, globalization and technological changes led to its economic decline and eventual closure, reflecting broader deindustrialization trends. Its subsequent transformation into a National Historic Park represents a shift from industrial production to cultural preservation and urban restoration. The park now offers exhibits, guided tours, and educational programs that highlight the history of textile manufacturing, fashion and design and the various ways in which the efforts to produce fabric also wove the culture and shaped the identity of a community. This preliminary study situates the mill, its labourers and its products both historically and today in the form of a National Historic Park, as a shaper and perpetuator of fashion, culture, education and community while pointing to opportunities for further research to understand the relationship between fibre production and culture.

**Keywords:** *Cotton; Mills; History; Culture; New England*

## **THE COTTON MILLS OF LOWELL MA: WEAVING THE FABRIC OF COMMUNITY**

The Boott Cotton Mills Museum at Lowell National Historical Park sits in Lowell, Massachusetts, 30 miles from Boston on the Merrimack river near Pawtucket Falls. It was developed in the 1830s as a new mill town amongst a consortium of textile manufacturing operations established and operated by the Boston Manufacturing Company. Operations faltered in response to 20th century challenges until finally ceasing in 1955. Soon afterwards, in the early 1960s, a group of Lowell citizens, most of them descendants of the mill workers, came together with a plan to “revitalize the community, transform the educational system,

and stimulate the local economy” (National Park Service, 1992, p. 90). They proposed to celebrate the region's fibre- and weaving history by turning the mill architecture and the diverse community the mill workers had established all around it into an “historical park that would present the city as a living museum” (ibid.).

Through primary and secondary source analysis of materials from the National Park Service, and site visits to the Lowell National Historic Park site during May through August 2024, this paper considers the lasting impact that textile production at the Boott Cotton Mill has had on the identity of the region. Other researchers have noted the historical and industrial importance of New England mill towns in the region, and examined

the opportunities and challenges of the National Park Service's "culture-based approach to revitalization" and the city's partial "renaissance" (Stanton, 2006, p.3) through heritage tourism. This paper contributes to the literature by considering the ways in which fibre, fabric, and textile manufacturing are both resources for and perpetuators of culture. It offers perspective on how the repurposing of industrial heritage sites such as textile mills, can preserve the historical legacy of a region while generating innovative collaborations that enhance socio-economic prospects, civic pride, and community-engaged learning.

## **FROM NEW ENGLAND FARM GIRLS TO ETHNIC ENCLAVES**

The Boott Cotton Mill is one in a series of New England textile manufacturing sites developed under the auspices of the Boston Manufacturing Company established in 1813 by Henry Cabot Lowell and a group of business associates (Mullin & Kotval, 2021). These textile mills and the urban communities that sprung up around them played a critical role in the rise of the American Industrial Revolution by harnessing natural resources (river power and raw materials), technological innovations, and human labour. The Boott Mill of Lowell, Massachusetts was among the most successful of these (Gross, 2000).

It was designed and overseen by former British army engineer Kirk Boott. Boott's grand vision for the project went well beyond the factory itself and included city planning, architecture and construction of streets and buildings as well as "mills, canals, locks, machine shop and worker housing" (National Park Service, 1992, p. 32). Throughout the 19th century, the Boott Mill transformed the region from an agrarian settlement to a booming industrial zone employing thousands of workers. Initially, labourers were drawn from surrounding farm communities: primarily young women who could be spared from farm work to take paid employment in town. These young, unchaperoned workers, typically ranging in age from 15 to 25, were obliged to live with relatives or in mill-owned boarding houses managed by older women also employed by the mill (Dublin, 1994). These "mill girls" formed the backbone of labour from the early 1830s to the mid-1850s until waves of Irish immigrants fleeing the Great Famine arrived in droves, eager for work.

Various global crises ensured the continuing influx

of other immigrants whose cheap labour benefited the mill while simultaneously undermining efforts to improve labour conditions and causing inter-group tensions. From its origins as a proud "Yankee mill town" in the 1830s, by the 20th century, Lowell had become home to more than 40 different ethnic groups including, "Irish, French Canadians, Greeks, Poles, Italians, Swedes, Portuguese, Armenians, Lithuanians, Jews, [and] Syrians" (Kenngott, 1912; National Park Service, 1999, p. 68) and sustains a host of ethnic enclaves. Like the fabrics being designed and woven in the mill, these groups learned to live and work together and their cultural, linguistic and traditional influences are now woven into the cultural tapestry of the region and continue to influence it today (Forrant, 2022).

## **GLOBALISATION AND UNRAVELLING**

With access to cheap human labour, and raw materials in the form of cotton planted and picked by African slaves, rapid technological improvements, and a steady demand for textiles at home and abroad, the New England mills boomed profitably for more than a century (Yafa, 2006, 112-113).

Alongside this profitability came social organisation that, among other things, led to unionisation, demands for fair pay and worker protections, government regulations for land and water use, and higher taxation. As technologies improved, outdated machinery required costly updates to maintain productivity. At the same time, post-Civil War opportunities appeared in the Southern States where civic and business advocates offered cheaper and abundant land, labor, and resources without the constraints of high taxes or worker protections. Instead of reinvesting in the older New England mills, capitalists sent their money south and the mills went into steep decline (Gross, 2000).

As great swaths of humanity flooded into America from war- and famine-ravaged regions around the world, a steady state of decline had descended on the mill operations of Lowell. World War I brought a short uptick of productivity but was soon followed by closures in the 1920s. The American stock market crash of 1929 and the decade-long Great Depression exacerbated the situation further. Another blip of productivity occurred as mill operations shifted to support the demand for fabric and munitions during World War II but again fell

off severely until the Boott Mill finally closed its doors in 1955 (ibid.).

As with other communities where industry falters, the mill monopoly seemed to be a death sentence for Lowell and many families left the area in search of economic opportunities elsewhere (Blewett, 1982; 1990). The mills and associated buildings were closed and fell into disrepair or were knocked down to make way for modern projects (ibid.).

## THE NATIONAL PARK SERVICE AND THE BOOTT MILL

At approximately the same time the Boott Mill was in its heyday, the United States was enriching and diversifying its national identity through a series of environmental and social initiatives. Among these was the creation of a National Parks system distinguished by the idea that land should be set aside for the enjoyment and benefit of the public, as well as for the preservation of its natural beauty and wildlife. America's first national park was formed in the state of California when American president Ulysses S. Grant signed the Yellowstone National Park Protection Act on March 1, 1872 (Dilsaver, 2016).

President Theodore Roosevelt in particular, was instrumental in promoting such efforts and even expanded the scope of protected lands through the Antiquities Act of 1906, which allowed presidents to designate national monuments (Lee, 1971). The National Park Service (NPS) was officially established in 1916 with the passage of the Organic Act, signed into law by President Woodrow Wilson (Library of Congress, N.D.). This act created a single federal agency responsible for managing all national parks and monuments, ensuring their protection for future generations.

Key milestones in the service's history include the expansion of protected lands during the New Deal era, the environmental movement of the 1960s, and the addition of diverse sites that reflect the cultural and historical heritage of the United States, such as civil rights monuments and Native American heritage sites. Through the years, the system expanded to include not only parks but also national seashores, lakeshores, recreation areas, and historic sites (Butcher, 1969). The 1960s and 1970s saw further growth in the system, as public awareness of environmental issues increased, and new laws such as the National Historic Preservation Act and the Wilderness Act were established to protect cultural and natural resources (Harmon

& Conard, 2016). Today national historic sites, national monuments, and urban parks are integral components of the U.S. National Park System (NPS) that extend the scope beyond traditional wilderness parks. Although their primary focus differs—cultural preservation, natural protection, or urban recreation—they all contribute to the overarching mission of the NPS to conserve resources for public enjoyment, education, and inspiration. They allow the NPS to reach more people in varied environments, from rural areas to bustling cities, while safeguarding the country's natural, cultural, and historical legacy. They also generate a considerable amount of socio-economic value and inform America's national self-image (Soukup & Machlis, 2021).<sup>1</sup>

The early national parks primarily provided opportunities for access only for those with greater means with a social or cultural proclivity for nature and wild places. The recent development of the National Park System with units in the vicinity of cities and in recreationally popular places has broadened those opportunities for access and thereby broadened the audience for and constituency of national parks. It is particularly important that all Americans benefit from the social covenant that national parks represent (2021, p. 589).

At the very point Lowell and its mills were in sharpest decline, the National Park System provided an opportunity to recognise the important social and economic contributions that the fibre culture of the region had made to the fabric of American and global society. During the 1960s, a group of Lowell community members and civic leaders, like their visionary forebear Kirk Boott, sought an integrated approach to both honour the town's manufacturing and cultural legacy while revitalising the town and restoring pride in the region. One idea was a proposal to have the industrial mill site recognised

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as a site of national historic significance by the National Park Service. This idea was developed and refined until, in 1978 it was recognised by Congress through the establishment of the Lowell National Historical Park and the Lowell Historic Preservation Commission (Farrant, 2022).

After improvements on a few downtown buildings, the “movement quickly gained momentum, benefiting from a new public appreciation for industrial architecture and a belated realization that preservation should embrace working class history and culture” as well as the natural environment (National Park Service, 1992, p. 88).

The landmark decision to convert the old Lowell mill created the opportunity to revitalise socio-economic opportunities and restore civic pride by recognising the important role it had played in the industrial revolution and of New England culture. It also honoured the contributions of the rural labourers, women, and new immigrants in the creation of American labour laws and social welfare initiatives, and promoted Lowell’s place as an important player in the planetary flow of fibre’s influence.

## **CONTRIBUTIONS TO REGIONAL REVITALIZATION**

Today, the weaving room full of looms within the Boott Cotton Mills Museum within Lowell National Historical Park operates solely to give visitors insights into the region’s past. Visitors can witness power looms and other historic machinery, operating much as they did in the 19th century, allowing visitors to see and hear the machines in action and gain a sense of what it must have been like to work in the mills. There are numerous exhibits highlighting the role of the ‘mill girls’ and later immigrant workers that include historical artifacts, personal stories, and photographs that lend a human side to the American Industrial Revolution, labor history, and the social and cultural transformations that took place in Lowell. Guided tours of the historic textile mills, canals, and worker housing are available and park rangers lead educational programs, offer workshops and give demonstrations that focus on historic crafts, such as design, weaving, and other trades connected to Lowell’s industrial past. Young visitors can participate in the Junior Ranger program, which encourages children to explore the park, learn about its history, and complete activities that earn them a Junior Ranger badge. There are also

summer camps, internships, and service-learning opportunities (National Park Service, 2024a)

The park has opportunities for virtual learning experiences as well. Anyone interested in Lowell’s history but unable to visit in person can engage via virtual field trips, ranger talks, and webinars. Collaboration with local universities, such as the University of Massachusetts Lowell, allow for ongoing research opportunities that inevitably inform educational materials including brochures, maps, self-guided tour guides, publications and research reports, and a variety of public programming. Teachers and scholars can access a wealth of online materials through the park’s website, including lesson plans, primary source documents, and interactive media related to the industrial history of Lowell (ibid.).

Additionally, the park hosts annual events recognising and celebrating the diverse cultural heritage of Lowell, including music festivals, ethnic celebrations, and special historical reenactments. For example, during the summer of 2024, the museum hosted a photographic exhibit about the contributions of Portuguese immigrants to the life and culture of the mills and Lowell society.

The state of Massachusetts is home to sixteen national parks. Six of these are National Historic Parks and the remainder are a combination of scenic trails, historic sites, recreation areas, and seashores (National Park Service, 2024b).

According to the most recent aggregate data, these sites are host to nearly eight million visitors annually and generate more than a billion US dollars in what the National Park Service refers to as Economic Benefit from National Park Tourism (ibid., 2024c). These benefits include visitor spending, job creation, and secondary effects from labour income, as well as economic output to the national economy and relative value added. In the five year period from 2019 to 2023, the Lowell Historic Park hosted more than one million visitors (ibid.).

In addition to enjoying the park’s resources, those people parked, ate, shopped, and stayed in the region creating value for the businesses and communities in the area surrounding the park. The visitors were also engaged with local businesses, park employees, and various services. Admission to the Boott Cotton Mill Museum is \$6 USD for adults and \$3 for student and seniors. Despite a lack of specific data on visitor demographics we can assume more than five million dollars was

generated in museum entry fees alone. If visitors also paid for a canal tour (Adults \$12, seniors \$10, youth/students \$8), the number is closer to fifty million. Any purchases at the park store, local eateries, or accommodation stays increase that number further while also generating business and employment opportunities for local people. Even with such cursory data, it is clear the national park designation ensures a continuation of economic opportunity associated with the mills that would not otherwise be present after the closing of the mills for textile production.

The rich array of historical, cultural and educational resources the park contains ensures the mills still shape regional identity and make a critical contribution to the socio-economic revitalisation of the region. Heritage tourism based on fashion, design and textile manufacturing now creates economic opportunities for residents, myriad opportunities for community engagement and partnerships with local organisations, while also educating the public about the material, social and economic contributions of textile mills in Massachusetts.

## **BROADER IMPLICATIONS**

Research by Wayland Barber (1994), St. Clair (2019) and Postrel (2021), demonstrate that tremendous influence of fibre and textiles in shaping culture and civilization. The New England cotton mills have a small role within this global textile history. The evolution of the Boott Cotton Mills in Lowell, Massachusetts therefore offers an intriguing interdisciplinary case study for analysing the industrial, socio-economic, and cultural effects of textiles, as well peripheral perspective for fashion and design studies.

For example, as the mills produced and made standard fabrics more accessible to wider populations, designers could create garments for broader audiences, setting the stage for the rise of ready-to-wear fashion in the late 19th and early 20th centuries. The Boott museum displays a variety of the plain and patterned textiles they produced that reflected both consumer demand and evolving aesthetic trends. Advances in machinery allowed for more intricate designs that could be produced in step with changing tastes in clothing and interior textiles as well as seasonal fashion cycles, underscoring the growing link between manufacturing schedules and consumer fashion trends. Furthermore, while mechani-

zation enabled mass production, traditional craftsmanship and artisanal methods continued to influence the development of more specialized and intricate textiles such as tweeds and calicoes that reflected global designs and fed the demands of haute couture. The Boott Cotton Mill and its transformation into a National Historic Park is a fascinating example offering multifaceted insights into New England's relationship with fibre, fashion and design, and the role that fibre textiles played in bringing the world to America's doorstep and vice versa. Cotton fibres were central to the industrialization and social transformation of New England. The textile mills that processed the cotton brought significant economic growth and transformed the social dynamics within these industrial communities, first by their reliance on women and later on immigrant labour pools. They also urbanised rural areas and linked local New England and American economies with global trade and migratory networks. When cotton production diminished due to changes in global manufacturing and trade, the community stagnated.

The innovative collaboration that transitioned the Boott Cotton Mill into a National Historic Park underscores the potential of preserving historical industrial sites as cultural and educational resources that can also improve economic opportunities. The Mill and museum displays bridge several fields of research (e.g., history, socio-economics, fashion and design, and cultural studies) by showcasing period textiles and machinery, historical garment construction as well as the evolution of textile design and related technologies. For example, one museum display highlights the journey of fabric and design from natural fibres for clothing to synthetic materials used in space travel and medicine. The displays also showcase the mill's role in shaping cultural and economic landscapes related to fashion and design by highlighting the tensions of an industry reliant on workers desperate enough to put up with difficult, dangerous working conditions, low wages and limited rights; namely, women, immigrants and racial minorities. While acknowledging the unpleasant realities of exploitative labour practices, the Historic Park and Museum site also celebrates the richness of culture these groups brought to the region and creates current opportunities for inclusion and cooperation. By maintaining a tangible connection to the past and fostering opportunities for educational and economic development in the

present, the Boot Cotton Mill acts as a valuable example of the potential for historical narratives about fashion and design within the textile industry, to restore, enhance and generate civic pride in a region.

This example of the Boott Cotton Mill and its transformation into a National Historic Park opens up several avenues for future research on the contribution and consequences of fibre manufacturing and other industries for educational, tourism and policy issues. For example, comparative analyses of similar industrial heritage sites, both within the United States and internationally could explore how different regions preserve and interpret their industrial pasts and the varying impacts on local economies and communities. The innovative approaches taken for preserving and disseminating the resources at the Boott Cotton Mill Museum provides insights into the role that modern technologies might play. For example, investigating the role of digital technologies, such as virtual reality and digital archives, in enhancing the accessibility and engagement of industrial heritage sites could be a valuable area of study. This includes exploring how these technologies can be used to preserve and interpret historical narratives for broader audiences.

Other research might build on this study to delve deeper into the socio-economic impacts of heritage tourism on local communities, focusing on job creation, economic revitalization, and cultural preservation. This includes evaluating the effectiveness of public engagement strategies used by heritage sites. For example, by engaging local communities in research about their industrial heritage richer, more nuanced insights may be found. This approach could include oral histories, collaborative exhibitions, and community-led conservation efforts.

The Lowell National Historic Park resources and educational programming suggests a rich opportunity for community-engaged and integrated learning, from primary education through to higher education, on the history and ethics of fibre textile production and aspects of the fashion industry's influence on culture and society. This includes opportunities to develop relevant teaching materials that engage students with historical and contemporary issues. Furthermore, public engagement with these sites through interactive exhibits, public lectures, and community workshops can enhance historical and current

understanding related to fibres, fabric, and the global fashion industry

Finally, the Lowell story creates interesting opportunities for other studies that could provide policy recommendations for the conservation and public or touristic use of industrial heritage sites. This includes exploring funding mechanisms, legal frameworks, and best practices for balancing preservation with social and economic development.

The potential for future research related to this preliminary study are broad and interdisciplinary, and bring opportunities to deepen understanding of the historical, cultural, and economic, dimensions of fibres and textile production. These insights can inform heritage conservation, educational initiatives, and policy development related to tourism, among other things.

## CONCLUSIONS

This paper contributes to theoretical discussions on the agency of fabric, particularly cotton fibres and the fashions they produced, in shaping historical and cultural narratives. It treats fibre not merely as a commodity but as a material with its own history, culture and influence, enriching our understanding of how everyday materials affect human life and society. This case analysis highlights the role of the Boott Cotton Mill in constructing cultural identity within the region. By preserving and interpreting the history of the mill, we see how industrial heritage sites can serve as symbols of shared history and civic pride, influencing both regional and national identities and spurring innovations that can create new socio-economic. Additionally, we gain insights into the importance of public engagement with historical sites that may allow communities to reflect on their past and its implications for the present and future. This process can thereby foster a deeper appreciation for the material and immaterial heritage associated with fibres, and textiles, fashion and design, while sustaining viability in the post-industrial economy.

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