Lowell, Massachusetts: The Original Mill Town

The first part of the 19th century in America brought the boom of the Industrial Revolution, a time when free-flowing capital and successful entrepreneurs changed the course of America from a freshly organized democracy into one of the world’s largest powers. The northern mill cities developed into world leaders of production and innovation, but none were larger, more productive, or more replicated than Lowell, Massachusetts. Lowell was not the first mill town, but the ideas implemented in Lowell became a blueprint for successful mill operations across New England, making Lowell the most historically significant northern city of the Industrial Revolution. Lowell was revolutionary in its urban design, business model, and mechanical innovations throughout the 19th century. Although the mid-1900’s saw turbulent economic conditions for the city, Lowell emerged from the 20th century with renewed vigor and significance, securing itself once again as one of Massachusetts largest and most productive cities.

The first cotton mill in the United States was not in Lowell, Massachusetts, but rather in Pawtucket, Rhode Island, which began operation in 1791. Samuel Slater, an experienced cotton mill supervisor in England, arrived in New England in 1789 looking to exploit his knowledge and start a mill in Rhode Island. After successfully opening the first water-powered cotton mill in America, Slater expanded his operation into a new town, called Slatersville, in 1803, where he set up not only a mill, but boarding houses and a company store. This ready-made village, constructed around a mill-based economy, became known as the Rhode Island System (RIS); a way to keep labor close at hand by employing entire families in mill operations, and providing their needs with company-sponsored amenities (PBS, n.d.), which was repeated in dozens of towns across Rhode Island.
Encouraged by Slater’s methods, a group of Boston merchants, led by Francis Cabot Lowell, constructed a water-powered textile mill in Waltham, Massachusetts on the Charles River (NPS, n.d.). The brainchild of mechanical engineer Paul Moody, the Boston Manufacturing Company opened in 1814, the first mill “not simply in the United States, but in the world, where the cotton was taken in at one end, and turned out finished cloth at the other” (Forrant and Strobel 2011, 38). A large part of the mill’s success was the capital investors behind it. Along with Lowell, partners Nathan Appleton and Patrick Tracy Jackson, wealthy merchants themselves, formed Boston Associates, and with no outlet for capital investment due to the embargo of 1807 and the War of 1812 with the British, the group turned inland to focus on industrial development (Langenbach 1981; ASME 1985). The Boston Manufacturing Company was expanding rapidly and production soon outpaced the available waterpower, prompting the entrepreneurs to seek a new location for expansion, which they found 20 miles north on the Merrimack River in East Chelmsford, Massachusetts (Pred 1965, 316; Forrant and Strobel 2011, 38).

Although founded in 1650, Chelmsford remained a small farming village until the late 1700’s, when the need for a canal system arose, circumventing a rough stretch of the Merrimack River known as Pawtucket Falls, to expedite the shipment of lumber from New Hampshire to the shipyards in Newburyport, Massachusetts. The Proprietors of Locks and Canals on the Merrimack River was incorporated in 1792 and by 1796, at a cost of $52,000, the Pawtucket Canal was open for business (ASME 1985; Forrant and Strobel 2011, 33). However, competition with the recently opened Middlesex Canal in 1803 and a declining shipbuilding industry, the Proprietors welcomed interest from Boston Associates to purchase the company and 400 acres of land, controlling the Pawtucket Canal (ASME 1985). The Merrimack
Manufacturing Company was established in 1822 as the first company constructed at the site and by 1826 the town of Chelmsford was renamed Lowell, after its founder who had died in 1817 (Lavallee 2011, 77).

New Englanders in the early 1800’s were skeptical at best of the manufacturing industry, as “mass production wrought violent and profound disruptions in formerly agricultural and artisan cultures (Weiss 2011, 83).” Lowell himself, on a pseudo-espionage tour of the Manchester, England cotton mills, was appalled at the squalid working conditions and surrounding slums (Forrant and Strobel 2011, 39). Lowell and his partners at Boston Associates conceived a plan for a new mill town on the Merrimack, one unlike any other mill town in the world. There was to be neatly arranged rows of streets and avenues, Shaker style boarding houses familiar to fellow New Englanders, large but unassuming mill factories devoid of lavish architectural details, specifically to cater to the subdued Puritanical ideology of rural farmers, and tree-lined streets interlaced with courtyard gardens and neatly arranged flower pots (Langenbach 1981; Weiss 2011, 82-84). The need to appeal to rural farmers was required in order to attract their daughters to labor in the mills, which would be “a shining example of those ultimate Yankee ideals: profit and virtue, doing good and doing well (Levallee 2011).” The mill owners promised a Paternalistic management style, clean boarding houses, religious services, education opportunities, and the highest available female wages in the country (Langenbach 1981; Levallee 2011, 77; Weiss 2011, 83). These ‘mill-girls’, as they came to be known, would typically work for two to four years, eventually leaving to marry and start families (Weiss 2011, 83).

In the opening decades, the mills of Lowell would become famous as an industrial utopia; a model industrial community known for its high standard of living, fresh design, and thought-
provoking cultural and intellectual activities. The ‘boardinghouse system’, as it came to be known, was one of the hallmarks of the ‘Lowell System’ – a model of mill town design and operation that would be copied all over the region. There is no evidence that life for the ‘mill girls’ was paradise, as they did work 80 hour work-weeks, lived six to eight to a room, often sharing beds, and their behavior was under strict scrutiny by boardinghouse managers. However, the girls were offered incentives not available anywhere else. There were as many as sixteen churches, providing exposure to theological viewpoints not available in the countryside. Fifteen regularly received newspapers and periodicals were available to the mill girls, along with a variety of books, providing a means of self-education and connection to the relevant events of the time (Weiss 2011, 92-93). In her autobiography of her time working in the Lowell mills as a girl, from 1834-1848, Harriet Robinson talks about the importance of literature and education available to the girls; “There were some who came to Lowell solely on account of the social or literary Advantest to be found there. They lived in secluded parts of New England, where books were scarce, and there was no cultivated society (Robinson 1898, 66).” Mill life for the girls, while undeniably laborious and difficult, was for many of them a welcome reprieve from the farm. An anonymous commenter in the Atlantic Monthly detailed the reality of farm life for young girls, where at dinner time:

“a kettle of soap-grease is stewing upon the stove, and the fumes of this, mingled with those that were generated by boiling the cabbage which we see upon the table, and by perspiring men in shirt-sleeves, and by boots that have forgotten or do not care where they have been, make the air anything but agreeable to those who are not accustomed to it…Farm life wore on women, who toil incessantly, from the time they rise in the morning until they go to bed at night…the farmer’s
life and the farmer’s home are generally unloved and unlovable things.”

(‘Farming’ 1858, 337)

In the early years of the New England cotton mills, “the caste of the factory girl was the lowest among the employments of women” remembers Robinson (1893, n.p.). In July 1840, popular author and reformer Orestes Brownson wrote scathing remarks in the *Boston Quarterly Review* about Lowell’s mill girls:

“The average life, working life we mean, of the girls that come to Lowell…we have been assured, is only about three years…Few of them every marry; fewer still ever return to their native places with reputations unimpaired. ‘She has worked in a factory,’ is almost enough to damn to infamy the most worthy and virtuous girl.”

In defense of their profession and honor, an unnamed author penned a response, published in the *Lowell Offering*, the worker-run publication outlet for literature of all types:

“Whom has Mr. Brownson slandered?...girls who['s] minds and manners have been formed under the eyes of the worthy sons of the Pilgrims…and who will become the mothers of quite a proportion of our future republicans…We are under restraints, but they are voluntarily assumed…Neither have I ever discovered that any restraints were put upon us but those which were necessary for the peace and comfort of the whole…the wages of factory girls are higher than those of females engaged in most other occupations…it is these wages which in great degree decide the characters of the factory girls as a class…and strange would it be, if in money-loving New England, one of the most lucrative female employments should be rejected because it is toilsome….” (December 1840)
Famous author Charles Dickens, in his memoir *American Notes*, wrote of the girls of Lowell, “healthy in appearance, many of them remarkably so, and had the manners and deportment of young women; not of degraded brutes of burden…” (Forrant and Strobel 2011, 41). Working conditions declined as economic competition increased, but the early years of the Lowell System marked a radical change in female employment and empowerment. As Harriet Robinson puts it, “In those days there was no need of advocating the doctrine of the proper relation between employer and employed. Help was too valuable to be ill-treated.” (1893)

Another important pillar of the Lowell System was the creation of the Vertically Integrated System (VIS); a business model in which one company controls every aspect of production, streamlining processes, eliminating external uncertainties, and keeping all the profits in-house. The VIS would gain infamy in the second-half of the century as notable business tycoons Andrew Carnegie and John Rockefeller implemented the practice in their respective enterprises (Perry 1988).

Part of the Merrimack Manufacturing Company’s operation was it’s machine shop, another highlight of the Lowell System. Started during the Boston Manufacturing days in Waltham by Paul Moody and subsequently brought to Lowell, the machine shop was critical to operations, second only to the mills themselves. All the necessary parts for mill operation or construction were designed and built right on site. Prior to this, mills needed to rely on British parts and expertise. In addition to the power looms and other industrial equipment, the Merrimack Manufacturing Company’s machine shop produced tools, parts, and machinery for other mills, as well as some of New England’s first locomotives – thirty-two in all by the late 1830’s.
Part of the beauty of Lowell’s urban design was its simplicity. A basic grid of streets and avenues provided simple planning, road construction, and lot division. The main street had shops and public buildings on both sides, along with clusters of identical housing. Churches, schools, and libraries were strategically placed as well. Lowell’s developers also implemented deed restrictions limiting building height, site coverage, and building use (Langenbach 1981).

Landscaping was an important and integrated aspect of city design and planning, a contradiction in the shadow of large, industrial mill buildings. The developers ensured the incorporation of greenery into the texture of canals, factories, and streets. Whereas the British factory cities were coal and steam driven, Lowell was water powered, eliminating soot, ash, and filth from the city, enabling the proliferation of lush landscapes. William Scoresby, a British visitor to Lowell, remarked in 1845:

“Lowell’s healthful flora thrived in the clean air, while the smoke from English factories blackened and withered plants. The power-generating infrastructure served a remarkable second purpose: embodying the faith that greenery and flowing water would edify and refresh the mill workers, river banks, and spillways were deliberately reserved as green promenades running through the city from end to end.” (Weiss 2011, 87)

Plants were even placed along the walls in the workrooms of the mills, giving them an appearance resembling a garden than a workshop (Weiss 2011, 89). When compiled together, Lowell achieved a level of refinement and amenity seldom encountered in any other city development.

To be noted regarding the location and success of Lowell and other mill towns of the era, as opposed to perhaps the expected location in closer proximity to the major hubs of the East
Coast such as New York, Philadelphia, or Baltimore, was, perhaps obviously, water power. As a commodity that cannot be practically moved, the big cities had limited access to water power, and certainly not enough capacity to power New England mills. Steam power was available at the time, but was prohibitive due to lack of local coal resources (Pred 1965, 316-317). Another factor benefiting Lowell and others was available capital. Boston Associates are said to have invested at least $400,000 into the first phase of development of Lowell, whereupon soaring profits allowed the creation of additional mill towns in Chicopee, Manchester, and Lawrence (NPS, n.d.). Communication methods of the time favored face-to-face business interactions, placing distant mill towns at a distinct disadvantage to the big cities of access to capital (Pred 1965, 323). Arguably, if it weren’t for abundant waterpower and homegrown capital, the landscape of New England would have looked much different.

The canal system, the lifeblood of the city, began as the original Pawtucket Canal in 1822 and was expanded to feed two branch canals in 1826. By 1836 four more canals had been dug to support demand from new companies (ASME 1985). During that time, the population rose from about 2,000 in 1822 to 17,633 in 1836, 11,000 of which were women; and $8 million in investments brought the city up to 120,000 spindles and 4,700 looms in operation (Forrant and Strobel 2011, 40). With the unprecedented and unforeseen growth of the city came the rush of construction and abandonment of simple street layout and building regulations. Factories and housing was arranged haphazardly to accommodate the 22 separate companies (and requisite boarding houses and other company buildings) formed in Lowell during its first two decades of operation (Langenbach 1981).

One thing that surprisingly sets early Lowell apart is the lack of architectural detail or flair. The leading characteristics of the city at the time were its identical boarding houses in long
rows and careful layout, dominated by large, but unimaginative, mill complexes. This simple, no-frills, all-business approach to city design and construction was known as the ‘Lowell Plan’, and was to be copied across New England, to varying degrees of success. The importance of this design type was not just in the simplicity and cost of construction, or the maximization of utility (such as a protruding ell encompassing the stairs), but also in the light of simple, unpretentious moral flavor preferred by the rural New Englanders that the mills were trying to win over. Interestingly, while other cities were replicating the modest Federal style buildings of Lowell, it was the Merrimack Manufacturing Company itself that designed and built a brand new flagship mill in 1845, called simply, the New Mill. Constructed in an elaborate Greek Revival style, adorned with pilasters between every window, a central, pedimented gable, and internal stairs, the New Mill at the end of Dutton Street, with an emphasis on a direct sightline to the rail station in the city center. As Lowell entered its third decade in the mid-1840’s, popularity had been shifting away from the large cities and toward the smaller, more rural mill towns, like Salmon Falls. The Merrimack’s jump from ordinary to ornate was part of the effort to attract more, better workers; and it worked. An excerpt from the 1851 Salmon Falls Directors Report states: “The workers do not include so large a proportion of girls from the respectable farmers’ families. The preference is not given to Lowell and the largest manufacturing towns. It is no coincidence then, with a clear attempt to match Lowell in sophistication, Salmon Falls opened a massive mill in 1845 with a near identical design as the New Mill in Lowell, in such a local reporter in Salmon Falls remarked, “[Salmon Falls’ new mill has] a more finished appearance than we recollect ever to have noticed in a factory…more elegant in outward appearance and interior finish than any other similar structure in America.” For the first time, there was real competition amongst the mills of New England (Langenbach 1981).
Although the largest and most productive textile city, Lowell was starting to feel pressure from competing cities across New England as technology evened out, the market saturated, and prices dropped. Without the high margins that characterized early Lowell and other mill cities, profits were generated by cutting wages and increasing productivity. Immigrants, willing to do the extra labor at lower wages, began to displace native workers. As such, there was an amplified need to recruit labor and increase production in the mills across the board. Rather than offer incentives to the laborers, companies wanted to attract investors and buyers to expand production, and the best way to depict stature and prowess is through new, highly stylized buildings. A seeming contradiction; as the mills were loosing business, they increased spending on architectural frivolities. The pattern in most declining cities is a withdrawal from pretentious design as a cost-cutting measure (Langenbach 1981).

No building across New England exemplified this more than the Dressing Mill of the Merrimack Manufacturing Company. Completed in 1865, the Dressing Mill reinvented urban design once again. Located with precision at the end of the Merrimack Canal and Dutton Street, the Dressing Mill brought together multiple architectural entities to create an unprecedented view down the canal, with the direct intent to demonstrate the superiority of Lowells’ first, largest, and most successful mill company. For the first time the community contributed to the architectural process, displaying a confluence of cultural identity, civic pride, and economic supremacy (Langenbach 1981).

Perhaps not surprising, the construction of the New Mill and the Dressing Mill, while glorious, masked what was happening in the rest of the city. As competition soared and profits fell, the integrity of Lowell’s utopian ideal fell away. The remaining mill buildings throughout the city received decreased levels of maintenance, and the construction of new buildings only
added to the already problematic congestion. The landscaping and attention to detail that described early Lowell was replaced by overgrown courtyards and dilapidated boarding houses, some of which were turned into cotton warehouses. As the new reality took hold, so fell away the utopian Lowell of the past. It is this period, argues Langenbach (1965), when the true Industrial Revolution begins; after market saturation has leveled profits and companies are, for the first time, forced to scrutinize their business model, and the ugliness emerges. Competition is the mother of invention and innovation, and competing companies began with cheaper labor, increasing productivity expectations, disregarding working and living conditions, and other forms of human degradation associated with the time period, “creating a dense urban environment which was oppressive without relief.”

As early as 1834, amidst worsening conditions, the native mill workers went on strike. Exposure and encouragement in reading and education empowered the first generations of mill girls to stand up and demand changes; they mounted strikes in 1834 and 1836, and started a petition campaign aimed at reducing working hours in the mills from 1843-1848. This forced mill owners to look for replacement workers, which they found in the steadily rising population of immigrants. Unsurprisingly, promotion of education and its literature were among the first items cut from the budget (Lavallee 2011, 78).

Ironically, the Irish in Lowell pre-date the arrival of native mill girls by at least 3 years, as they (30 original) were the men who built the first canals and buildings that would become the city of Lowell, where they lived off of wages of 75 cents a day and were denied company housing, instead forced to form a shanty-town away from the downtown area. This area would grow and eventually become known as the Acre, a gateway community for future immigrants (Marston 1988, 418; Forrant and Strobel 2011, 42; Lavallee 2011, 78). By 1830, the Irish
population was 500 men, women, and children. Living conditions in the Acre are described in an article in the *Niles Register*, a Portsmouth, New Hampshire journal:

“In the suburbs of Lowell, within a few rods of the canal, is a settlement, called by some, New Dublin, which occupies rather more than an acre of ground. It contains a population of not far from 500 Irish, who dwell in about 100 cabins, from 7 to 10 feet in height, built of slabs and rough boards; a fireplace made of stone, in one end, topped out with two or three flour barrels or lime casks. In a central situation, is the schoolhouse, built in the same style of the dwelling houses, surfed up to the eaves with a window in one end, and small holes in two sides for admission of air and light ... In this room are collected together perhaps 150 children.” (1831)

Of the accounted for twenty heads of household, sixteen were employed as laborers or by the Proprietors (Marston 1988, 418). The early days of Lowell saw amicable relationships between the Irish and the natives (hereafter interchangeable with Yankee). Coincidentally, the diminishing wages and working conditions in the mills in the 1840’s and 1850’s was met with mass Irish immigration due to the potato famines (Lavallee 2011, 79). Seizing upon the opportunity for work regardless of the conditions, the Irish became strikebreakers during the 10-hour workweek campaign of the mid-late 1840’s, reducing pressure on mill agents to improve conditions (Lavallee 2011, 79).

An attack by the Yankees on the newly constructed St. Patrick’s Irish Catholic Church in 1831 was met with equal force and rock-throwing Irish. Catholic parochial schools were seen as a threat to American values; Yankees wanted immigrant children to attend public schools, where they could receive a proper, Protestant, moral education rooted in patriotism and American ideals.
Discrimination of the Irish as a whole and encouraged hostility between the groups by mill agents created at best a fragile relationship between the two groups for the rest of the century and beyond (Marston 1988, 419; Lavallee 2011, 79). Despite the adversity, the Irish carried on. St. Patrick’s dedication in 1831 drew up to three-thousand worshipers, and due to its strategic location equidistant from two rival Irish sub-cultures; the Irish community gravitated towards and settled around the church in the ensuing decades. The Irish population soared to 11,000 by 1850, a full 33 percent of the total population. In responding to native strikes and emigration, Irish employment at one mill grew from 4 percent in 1836 to 62 percent by 1860 (Forrant and Strobel 2011, 44-48).

Between 1860 and 1900, amidst continued economic hardship, an estimated 600,000 French Canadians migrated to New England looking for a better way of life and steady employment (Forrant and Strobel 2011, 63; Lavallee 2011, 80). Hateful sentiments against the Irish were soon displaced by even stronger hatred for the French Canadians. Carroll Wright, Massachusetts’s Commissioner for Labor Statistics pronounced in 1881: “The Canadian French are the Chinese of the Eastern States.” He went on to describe them in greater detail:

“...They care nothing for our institutions, civil, political, or educational. They do not come to make a home among us, to dwell with us as citizens, and so become a part of us; but their purpose is merely to sojourn a few years as aliens, touching us only at a single point, that of work, and, when they have gathered out of us what will satisfy their ends, to get them from whence they came, and bestow it there. They are a horde of industrial invaders, not a stream of stable settlers.” (Forrant and Strobel 2011, 65)
Nearly all of the vices of a growing city were attributed to the mass immigration of French Canadians, echoed by authors such as Frederick Coburn, in *History of Lowell and Its People*:

“Many of the gravest problems of the twentieth century city first became acute in the last decades of the nineteenth century: deterioration of originally inadequate housing facilities for the working class; indifference to city planning for the future; neglect of the welfare of newly arrived immigrants; increasing tolerance of the evils of alcoholism and sex disease; a spread of coarsening influences in popular amusements and recreations; a new tendency toward vulgarity and ostentation among some of the well-to-do.” (Volume one 1920, 341)

The feeling of permanence was less applicable to the French Canadians, as many of them not only desired to one day return to Canada, but transportation there was readily available; only a day by train. Never the less, approximately 37,000 French-Canadians lived in New England by 1860, with thousands more coming every year (Forrant and Strobel 2011, 63:66-67). As one immigrant group followed another, so too did the discontent for the new groups arrival. The Irish were the most disinterested and distrustful of the French Canadians, seeing them as strikebreakers just as the Irish labor reform movement was gaining steam in the second half of the 19th century. They barred them from their church, St. Patrick’s, forcing the French to build their own church, also in the Acre, in 1868; St. Jean Baptiste (Lavallee 2011, 81).

The French settled in an area that would become known as Little Canada, a former dump owned by the Proprietors. They built large numbers of hastily made wood tenements on leased land, typically three-stories high and containing 28 small apartments. Details such as plumbing and heating were given little attention, resulting in frequent waves of disease and fires. George
Kennott in *The Record of a City: A Social Survey of Lowell Massachusetts* describes ‘The Harris’, the largest tenement building in Little Canada

“…two shops and 48 tenements of four rooms each, and often contains about 300 inhabitants. It has 30 rooms without windows…there are very few, if any, bathrooms. The washing is done in the kitchen, and the drying on outdoor lines controlled by pulleys.” (1912)

The pattern of immigration is cyclical: distinct immigrant groups suffer through oppression and discrimination upon arrival, then integrating into society as they displace native workers, then themselves becoming ‘native’. The new ‘native’ group then discriminates against the newest immigrant group, and the cycle continues. In Lowell, it was the native Yankees against the Irish, then it was the Irish against the French, then the French against the Greeks and Poles. Today Lowell remains a very diverse population with high percentages of foreign-born populations, causing some citizens to remark, “It’s sad when you have to leave the city you were born and raised in because it has become a foreign country. All American ideals, heritage, and morality has gone. It’s time for me to go.” (*The Lowell Sun* 2011)

To interject my own attempt at an unbiased opinion here, I dare to ask this person what their ethnicity is. Everyone was an immigrant once; we only differ in number of generations since immigration. Since my ancestors immigrated in 1639, does that make me more American that most people? It’s a convoluted argument best left at rest.

By the end of the 19th century and the early part of the 20th century, Lowell had succumbed to the affliction ailing most northern cities, capitalism. Following the Civil War, the American South was hungry for new industries, and saw an opportunity in the mills of New England to attract them south with too-good-to-be-true incentives: cheap and abundant land and
energy, lower taxes and transportation costs, the absence of unions, and lack of restrictive health and safety laws.

Employment in the mills steadily dropped from 17,000 in 1895 to 8,000 in 1936. Of the eleven largest mills in Lowell during the 19th century, only three were still open, the biggest three: the Merrimack, Lawrence, and Boott. World War II boosted the Lowell economy significantly, bringing women back into the mills as American men left for war-torn Europe and Asia. Competition with nearby factories also spurred by defense contracts kept wages relatively high: a $13 wage in 1938 rose to $29 in 1943. However, the end of the war signaled the end of the mills, and both the Merrimack and Boott mills closed in the 1950s. Blight now plagued the city and urban renewal plans necessitated the destruction of the Merrimack buildings in the 1960s, as well as the tenement neighborhood of Little Canada, the Greek neighborhood known as the Greek Triangle, and a ten-acre site called the Central Plaza, home to a mix of Polish, Lithuanian, Greek, Canadian, Italian, Armenian, Serbian, and Portuguese families (Forrant and Strobel 2011, 110-125). The process of urban renewal is certain to cause contention and upheaval, especially in the neighborhoods being affected and among the citizens being displaced. However, the laws of creative destruction apply to real estate and city planning and development as much as they do to business. Most if not all of the areas targeted for demolition in the 1960s and 1970s were in severe disrepair (Forrant and Strobel 2011, 121:124:127).

Lowell became one of the first cities in the world to evolve under the guise of ‘culture-led revitalization’, drawing on their former fame and prestige as one of the earliest, largest, and most innovative textile cities in the United States during the Industrial Revolution. The idea of bringing the National Park Service to Lowell started as the brainchild of Patrick Mogan, then assistant superintendent of schools. He envisioned a ‘learning laboratory’ within an ‘educative
a walk able, interactive, immersive learning experience. His idea gained traction, first through U.S. Senator and Lowell native Paul Tsongas and other potent political figures, and including local residents, business owners, community group leaders and bankers and financiers. In 1978, the Lowell National Historical Park opened, sparking the vision and incentive to continue redevelopment throughout the city (Stanton 2007, 85).

Arguably the biggest factor in Lowell’s rebirth as a leading Massachusetts city is the University of Massachusetts-Lowell (UML), which located in Lowell in 1991 by absorbing what was then the University of Lowell (Forrant 2001, 617). The installation of a state university branch can have profound economic, cultural, and social impacts on a small city. The economic impact provided by UMass-Lowell in 2013 was estimated at $812 million (UMDI 2014, 4). In addition to tangibles such as $24 million in Lowell-resident faculty and staff salaries, UML spent over $200 million on construction projects in the last few years, including the $95 million student center opened in 2013.

In an article in Radical History Review, Cathy Stanton is less enthusiastic about the direction that urban redevelopment has taken in Lowell:

“For all its undeniable achievement in reinventing itself, the new Lowell replicates many of the characteristics of the global capitalism as a whole and of postindustrial economies in particular. New development emphasizes market-rate far more than low- or middle-income housing, contributing to familiar patterns of gentrification…While the city’s overall level of prosperity has risen strikingly in recent years, this reflects its ability to attract those from the upper end of the new economy much more than any notable level of success in overcoming the problems of persistent poverty that remain for many residents and
neighborhoods…Which has made Lowell a very expensive place to live.” (Issue 98, 2007, 89)

Stanton’s argument isn’t wrong, but she missed (more likely adequate data wasn’t available) some key indicators of economic and social growth. Admittedly, Lowell ranks lower than the state average in some key economical statistics, as seen in Table 1.

<table>
<thead>
<tr>
<th>Homeownership Rate</th>
<th>Median Home Value</th>
<th>Median Household Income</th>
<th>High school Graduation Rate</th>
<th>Bachelors Degree Attainment</th>
<th>Poverty Level</th>
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<tr>
<td>Lowell</td>
<td>49%</td>
<td>$242,000</td>
<td>$51,000</td>
<td>78%</td>
<td>23%</td>
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<tr>
<td>Massachusetts</td>
<td>64%</td>
<td>$343,000</td>
<td>$66,000</td>
<td>83%</td>
<td>39%</td>
</tr>
</tbody>
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Table 1. *From the American Community Survey*

However, between 2000 and 2012, among low-moderate income families, improvements have been made. High school graduation rates are up 10%, Bachelors degree rates are up 5%, and homeownership rates are up 16%, all in a population that is 24% foreign born. So although the city is growing in wealth, indicators point to increasing opportunities for lower class citizens also (ACS, 2012).

In conclusion, Lowell is an exceptional American city, both for its rich past and promising future. The birth of Lowell in the 1820’s was the creation of a cityscape never before seen in the world. Massive amounts of industrial production capacity combined with artful sophisticated touches to keep that small-town feel. Lowell proved that an industrial city does not need to be a dangerous and dirty smear on the landscape. The system of employing rural farm girls was ingenious and equally beneficial in many respects. The Lowell System was imitated across New England and the city was widely respected across the world as a model, if almost utopian, industrial city. For the first time in an American city, architecture was used as a tool to
mutate social norms and in turn set precedents in urban design. As economies changed so too did the mills. Dropping prices led to lower wages, fueling resentment among different ethnic groups. Employment fell sharply, and between peak production in the late 1800’s and 1950, nearly all of the mills were closed, and Lowell was quite literally a shell of its former self. However, strong community involvement and determination led to a National Park designation, saving the Boott Mills, the finest remaining examples of Lowell’s rich history, from demolition. The University of Massachusetts-Lowell has been a major catalyst for all aspects of urban rejuvenation, not the least of which is massive inflows of capital and economic activity to the region. Since the very first days of Lowell, where Irish laborers constructed the town from scratch, the city has been a magnet for ethnicities of all types. That pattern continues today, with nearly one-quarter of the population foreign born. Lowell also happens to be home to the second largest Cambodian population in the country. With continued redevelopment of dilapidated areas and emphasis on community integration, Lowell will once again find itself in the discussion of great American cities, just as it did nearly 200 years ago.
References


http://www.uml.edu/docs/economic_effect_case_study_tcm18-119064.pdf