

(Slide 1) First, by means of introduction it is important to give a brief note of definition to the term mechanics' institute. Mechanics' institutes were commissioned libraries often supported by factory owners and other persons with vested interests in the scientific education of industrial workers and therefore these institutions are often discussed within the historiography of both the social history of industrialization and adult education. These libraries are often discussed as alternatives to competing third space venues such as pubs, taverns or saloons. While the establishment and use of mechanics' institutes was primarily a nineteenth-century phenomenon, there are useful antecedents in the eighteenth century as well as continued use into the early twentieth century and beyond. The nature of these establishments have often been in flux and it is this largely this plasticity that this paper addresses. For example, one can view the progression of the 19th century as well as the increasingly industrial society in the within mechanics' institute mission. It is also important to define what is meant by the term "Mechanic." In the context of industrializing urban centres, the term mechanic denotes a skilled or semi-skilled labourer. As I will discuss, part of the initial founding of mechanics' institutes comes from the shift from the skilled or artisan worker to the more available unskilled labourer. This progression reads, in the context of the mechanics' institutes, as a move from a initial focus on adult education to that of moralizing improvement. In this paper I will illustrate three examples that support my argument. These examples do not, however, provide the scope needed to fully understand the total development of the mechanics' institutes, but they do shed some light on the idea of the mechanic institute as uniquely adapt model for studying the social history of the industrial worker, the development of adult education, and the nature of little "L" liberal thought in the 19th and twentieth-centuries.

As the nature of manufacturing changed from cottage industry and small-scale production to one becoming increasingly mechanized, it was recognized by factory owners and industrial scientists like George Birkbeck (1776-1841) that there was a need for an educated workforce. Because of the complexity of the machinery and the science involved in production, workers who knew the physics of the machines and the chemistry behind the engines that moved them were valued. Birkbeck instituted a series of free public lectures on the “mechanical arts” in Glasgow. These lectures were intended to pique the interest of Glasgow workers in the sciences and to increase their understanding of the machines and devices they used in their work.

(Slide 2) Before Birkbeck, mutual benefit societies allowed artisans and others to gather and further their education in their trade. Originally founded in the late-eighteenth century, the New Haven Young Men’s Institute has gone through many changes, importantly, including a stint as the New Haven Mechanics’ Institute. According to founding documentation, from the early formation in 1793, the institute was primarily concerned with “...the establishment of a public library in the city of New Haven.” - scholars of the American public library movement will note that this social library worked in the fashion that Haynes McMullen terms a “strict” social library in that the collection was donated or purchased by and exclusively for the use of the subscribers and therefore the use of the term 'public' must be taken with that understanding. These subscribers, then existed under one corporate body known as the “Mechanic Library Society.” In this early society example, it is important to reiterate the point that I made earlier about the nature of the mechanics, that these mechanics in question were not labourers, but in this examples were, in fact, natural philosophers, artisans and hobby scientists. Class was a consistent dividing line in these early libraries as illustrated by the often prohibitive subscription fees.

It is not until the early nineteenth-century that the Young Men’s Institute underwent important structural changes to its mission. (Slide 3) Around 1815 the Mechanic Library adopted a logo and bookplate with the slogan, “improve the moment,” hovering above two cherubic figures practicing an artisan trade. Above the motto there is a stack of books with a ring of light around it to illustrate the importance of enlightenment through reading and education. To further illustrate this idea that mechanics' institutes demonstrate the attitudes surrounding shifts in labour from craftsmen to worker, the institute's motto and image used only a few years earlier in c.1804 (slide 4) paints a slightly different picture than that presented before. In this image, the cherubic figures, while still present, are holding a scroll that lists the humanist disciplines of “Theology/History/Biography/Voyages & Travels/ and Classical.” The figures are flying above a pile of open books, unfurled scrolls, a globe and an open atlas with a compass sitting on top of its open pages. The institute's founding bookplate (Slide 5) with the possibly apocryphal date of 1792 preserves perhaps the original focus of the library. This plate shows two craftsmen at an anvil with the same "improve the moment" motto printed above. There is a clear progression illustrated by these three bookplates in that each represents a stage of the evolution of the mechanics' institute library mission from craftsman and labour focused with little adornment to Romantic imagery to what is essentially a combination of the three. We can view, therefore the shifting nature of the representation of labour to about c. 1815 and perhaps what constituted a learned man in the industrial age before the shift in mechanics' institute missions became more explicitly focused on moral and not educational improvement.

One of the first major changes of the New Haven institute came in 1826 when a group of eight young artisans decided to improve upon the original society and created the Apprentices Library Association. This society, like its predecessor, had the aim of “intellectual improvement

of its members.” Perhaps due to the changing need in the community, in 1828 the institution’s name was once again changed to the Mechanics’ Institute, and the philosophy of the institute more explicitly mapped out the ethos and pathos behind the mechanics’ institute movement at large. William Borden, the librarian of the institute in 1904 wrote a short history of the institute wherein he explained that the principal mission of the library was the education for those whom formal education had failed. Borden’s history explains that the idea was to allow the “young working man” to learn what “interested him most” and not “what he *ought* to know. The library’s stated mission was a combination of the original idealized versions depicted in the romanticised bookplates from the earlier incarnation of the institute. The institute attempted to teach this young worker in the forms of, lecture, study, and classroom instruction. According to Borden, the classrooms were modelled after the public school model, and therefore were not as effective with older workers who felt out of place in the classroom. A Centennial Committee (1926) established to trace the history of the institute, understood the mission in much the same way. It was the findings of the committee that “self-improvement, not instruction from an outside source, was the motive power of the institute.”

Discussions of Mechanics' institutes often illustrate the general unease felt by the middle and upper classes about the working-class of the period. Both proponents and opponents of the institutions cited moralizing and temperance arguments to prise or disparage their purpose. (slide 6) A September 1832 editorial in the *Connecticut Journal* illustrates this sentiment by insisting that there are:

“...so many institutions established for the purpose of diffusing the benefits of education among the younger portion of the community, especially mechanics and the labouring classes....” The article continues: “...It is a matter of astonishment, that when so many facilities are afforded to

young men for acquiring useful knowledge, they should all be slighted or treated with indifference ... In general, the value and worth of them are not appreciated."

The institute is described as a noble but ignored gift for the working-class to aid in their educational and moral improvement. Additionally, the author makes note that, “to gain knowledge requires active effort; the passive instruction imparted by lectures makes but little impression, compared with that made by patient, preserving study.” The author of the editorial continues, “but so long as the semblance of knowledge can be maintained by attending lectures, and while they serve as a cloak for ignorance, it will be difficult to persuade our young men that it is by study alone that substantial information can be acquired.” With this pronouncement, the author makes their belief known that despite lectures and classes, the working youth will never have the discipline for actual learning without contemplative study; a luxury not generally afforded to those working in the mills and factories. Within much of the American press covering mechanics' institutes at this time, there is a pervasive dual message of condescension and support for the moral cause of self-improvement.

This message of improvement can be read in George Barrell Emerson's address given at the opening of the Boston Mechanics’ Institution in February 1827. Emerson, an educator and eminent man of the nineteenth-century delivered a speech which like the article in the *Connecticut Journal*, draws upon the imagery of man being lifted out of poverty through education. Emerson discusses the natural ability of humanity to learn about his environment and to “throw upon the business and labours of common life the light of reason and philosophy.” The use of Enlightenment language is reminiscent of the bookplates used in the New Haven Young Men's Institute and also the original mission as described by George Birkbeck. Emerson reinforces his linkage that “Science and art are of a kindred nature...but they have been separated

by the ignorance and necessities of men, and have both deeply suffered from the separation.” This suffering is implied in Emerson's plea that in the centuries before, artisans were skilled craftsmen associated with art and culture. And that in juxtaposition, it is the recent relegating of working people to the factory floor that is a fault for the current social ills, deficient education, and stigma surrounding the working-class.

Throughout his speech, George Emerson is evoking the nineteenth-century liberal philosophy of Self-Help as defined by missionary societies and importantly author Samuel Smiles whose titular work propagated the idea of helping less fortunate people help themselves through various forms of charity; including the dreaded work house. One of the most poignant lines from the speech, as it pertains to the doctrine self-help begins, “temptations assail him in vein. He is armed by high and pure thoughts. He takes a wider view of his relations with the beings about and above him...he glories in the consciousness and the hope of immortality.” These lines illustrates a direct appeal to audience that this institute will fix the problem of intemperance and vice by giving the workers a more civilized avenue of pursuit.

Importantly, Emerson also makes an appeal to employers who, by this time were becoming somewhat leery of the influence of education on their workers due to the resulting desire for better conditions. He notes that there is no need for concern as a person with better education will be better at their job. He concludes by asking, “let a mechanic understand the nature of the material he employs, enable him to predict the effect which heat and air and moisture will have upon it, show him how to counteract that effect; will he, in consequence of this knowledge, produce a less durable work?” For all of Emerson’s praise of the industrious working population, however, there is a distinct nod to the middle-class sense of unease that resounds throughout much of the speech as he says, , “it is not our object to make deep

philosophers, ” making it clear that the larger mission was the improvement of the state of the working-class, but not to bring them on par with their societal betters.

Similarly, at the opening of the New York Mechanic Institution in New York City, this heavy-handed approach to public enlightenment was made far more explicit with the foundational speech by Thomas Mercein. In his speech, there is both an appeal to the mechanics themselves to use the institution for their own benefit as well as an appeal to the city government and the upper-class citizens of the city to illustrate that the institution will pull the lower ranks out the depths of implied depravity. The opening of the address begins with Mercein’s use of the common civic improvement rhetoric used for many of the mechanics’ institutes. The institution was devoted, he says, to the future generations who will seek the “deep fountains of knowledge” found within the walls of the institution. The main purpose of the institution was to help pull “genius from obscurity, expand the human intellect, increase the duration of civil liberty and multiply the blessings of social life.” Mercein’s speech comes to a point, however, where the religious rhetoric displaces the educational benefit:

“...at this moment witnessing, this, our labour of love, and raising their highest hallelujahs to that God, who put it into the hearts of their former Brethren to raise a building, devoted to the education and instruction of the helpless and the destitute...”

By using images of the helpless and destitute, Mercein is making it known that the institute will be there for the community and help uplift the public with education. It is not, however, the mechanics’ institute movement’s scientific education that Mercein believes will help those on the lower strata of the social sphere. In order to become “useful” in society, Mercein explains, the mechanics and the mechanics’ children must find “information... that will snatch them from the

vortex of vice and dissipation, to which ignorance, and the absence of religious education were leading them...that they imbibe those principles and receive that bias, that will make them useful in their day and generation."

While the founding of many institutes was based at least partly on the society's focus on Self-Help, the actual education provided within the institutes may not have always supported their ideals fully. American Transcendentalists like Ralph Waldo Emerson lectured, often in mechanics’ institutes, about the need to find help from within - as opposed to the nature of charity found with Self-Help. In his address to the New Haven Young Men’s Institute, he told the crowd of mechanics, trades people, merchants, and other onlookers about the need to find happiness, faith, and intellectual satisfaction within their own minds, not to rely on others to dictate their needs to them. The speech delivered went against much of the “Self-Help” literature housed within the collection of the institute. As the library found that increasing numbers of patrons wanted to read fiction and newspapers, the amount of sensationalized rags-to-riches novels in the collection increased. These works, by authors like Horatio Alger, T.S. Arthur and Oliver Optic told moralistic stories that highlighted much of what was preached in Smiles-esque Self-Help literature. In works like Arthurs’ *Ten Nights in a Bar-room* frightful tales of lives ruined from drink and the above mentioned sin of depravity. The overt morals of temperance and servitude in these stories seem, to modern readers, explicit in their goal of reforming the working-class populations. Lectures on Self-Reliance taught the attendees not to adhere to the societal constructs but to break free and develop their own success.

With the increasing obsession with imposed improvement, mechanics' institutes began to lose their focus in both Britain and in America in the mid-nineteenth century. While some institutes insisted on education as a paramount feature of the lectures, other institutes simply



wanted bodies in the seats and held lectures on popular topics, often including song and humour to convince patrons to sit through moralizing lectures . Because mechanics’ institutes were competing with pubs and music halls, many institutes held programmes that brought some element of the music hall to the institute. (Slide 7) Penny readings were one hybrid form events aimed at the working-class. These readings were an attempt at getting the men out of the pubs, and into more cultural and wholesome events. There typically was, however, music involved as a way to still get people in the door, and to keep them in their seats. One flyer promoting a Penny Reading at the Working Men’s Institute, Clerkenwell, London (1866) offers a number of music hall and vaudeville type entertainments with poetry and improvement lectures sandwiched within. The arrangement of the entertainment is interesting in that it places the literature readings amongst songs, and forces the audience to stay through the intermission in order to see the piano playing and the comedic, ventriloquist act. This heavy-handedness illustrates the middle-class efforts to give the working-class a wholesome evening in the institute, as opposed to the bawdy music halls or pubs. This flyer also illustrates the shift in purpose in the institutes as the century wore on. By 1866, when the Clerkenwell performance was scheduled, there was far more of an emphasis on moral and intellectual betterment and particularly on temperance than on scientific education.

As evidenced in programme from the Clerkenwell Penny Reading demonstrating how Self-Help philosophy was included in entertainment, insight into the teachings of self-reliance philosophy can be seen in the programmes of the Young Men’s Institute in New Haven, Connecticut. (Slide 8) By 1856, there is a noticeable shift in the focus of the institutes’ lectures. Printed in the New Haven *Journal and Courier*, an 18 November 1856 programme advertised lectures by Ralph Waldo Emerson and others, but only a brief mention that “A short course of

popular scientific lectures may also be provided during the winter,” and it is evident that there is no longer the pretence of the established goals of mechanics’ institutes in the earlier years of the nineteenth-century of providing mechanical arts training and further education in natural philosophy. The focus instead is on improvement of the mind and soul. The lectures at this late stage in the development of the institute have the common theme of high-minded literature, social critique, and the philosophy of self-reliance. (Slide 9)

Mechanics’ institutes existed in between two distinct eras of western industrial history. In the early formation of the industrial centres of Britain and the U.S., there was an idea that skill would outlast the machine, and that artisans would remain a necessary factor in the skilled workforce. Mechanics’ institutes were a key factor in this short period of industrial education, but became less relevant both as a result of the loss of their original focus and the availability of public and regional libraries. As the institutes shifted from education to moral improvement, the lectures changed from those of the "mechanical arts" to those of the related, but differing models of both the liberal "Self-Help" and the individualistic "Self-Reliance." In the early nineteenth-century, there was an emphasis on trying to provide workers with a foundational level of scientific education, but as the century wore on, this sentiment faded and the main commodity in the factory was not the skilled workman, but instead the inexpensive and plentiful labour found in undereducated men, women, and children.