The Mechanics’ Institute Movement and its Contribution to both British and American Nineteenth Century Adult Education

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Overview

• Glasgow MI was opened on July 5, 1823 some 192 years ago, with Dr George Birkbeck as its first President,
• In the same month and year, the Liverpool Mechanics’ Institute and Apprentices’ Library was also opened,
• The London Mechanics’ Institution were opened later in 1823....and then the Movement spread across Britain.

Dr George Birkbeck M.D.
The Distribution of Mechanics’ Institutes in across the British Isles: 1850

Map 3.1 The distribution of mechanics’ institutes throughout the British Isles in 1850

Source: Hudson, Adult Education, pp. 232 - 238
• Hudson (1851) makes mention of the expansion of the Mechanics’ Institute Movement spreading from Britain overseas
  – Germany
  – India
  – New Zealand
  – Australia
  ...and across the Atlantic to Canada and America.
Not one-sided dialogue

- In July 1823, the Liverpool Mechanics’ Institute and Apprentices’ Library was opened which Kelly (1957) states had been influenced by the New York Apprentices Library opened in 1820.

- A ‘painted silken banner, sent by the apprentices of New York to those of Liverpool, was unfurled’ It had both the eagle and lion and inscribed with the message *New York sends her good wishes to Liverpool* (Mechanics’ Magazine, 15 Nov. 1823).

- A gift of thirty volumes of English writers, printed in the Union, was sent to Liverpool from New York, Philadelphia, Boston, Baltimore and Connecticut for the Liverpool Apprentices Library.

- American influence was felt in Britain before the Movement really got going across the rest of the British Isles.
Liverpool Mechanics’ Institute and School of Art
Built 1835
(Now Liverpool Institute of Performing Arts)
• Charles Dickens gave readings at the Liverpool Mechanics’ Institute, staying at the Adelphi,

• He was a great supporter of the MI Movement and raised much-needed revenue for institutes at which he gave readings,

• He also visited America....
• The founding of American societies for the diffusion of useful knowledge, were similar in organisation and use as the first British ones founded as mechanics’ institutes 1823 (Kett 1994).

• American newspapers did carry European news stories about politics and social developments including the emerging Mechanics’ Institute Movement.

• Speeches of Lord Brougham, for example, would have been put into print and magazines, in Britain, it was the Mechanic’s Magazine, first published in 1823, and in America, the equivalent was the American Mechanic’s Magazine which was first published in 1825.
• ‘Birkbeck was the central figure...and America felt comfortable in the assurances of old-world precedent.
• Glasgow, and London were proof that urged America in support of her own ambitions.
• Sinclair (1974) states ‘they might just reasonably have looked for examples amongst themselves. The mechanics’ institute began simultaneously in Britain and the United States’. The London MI and the Franklin Institute were established practically at the same time’ with both igniting an in-country Movement.
• Samuel Vaughan Merrick who realised, having inherited a bankrupt mill, that he had little technical knowledge and called upon relatives, one who had studied under the chemist Joseph Priestly in Britain, to support the foundation of the Franklin Institute in Philadelphia for the purpose of developing his and others workforce to support industrial needs (Kett 1994, p.114).

• The Franklin Institute was founded in 1824 and Sinclair (1974) states that it was modelled and organised on the ‘mechanics’ institutes of Great Britain’.
Like Birkbeck in Britain, John Griscom is seen as the founder of the Movement in America.

The New York Mechanic and Scientific Institute was established in 1822 and Griscom was one of its co-founders. Interestingly, both men were from Quaker families. (Kett 1994, p.112).

The aims behind the British and American Movements was of providing knowledge that ‘should be open to all that seek it; learning should be restricted neither by closed societies nor by exclusive universities’ (Sinclair 1974, p.5).
• The mechanics’ institute in New York was founded by a group of manufacturers and several professionals. Like its British counterparts, the Institute did not permit political activities and instead concentrated solely on providing education for its members,

• An un-named committee member at the time stated that without education in science, ethics and economics, the ‘laboring classes of the community will be doomed to an intellectual and political slavery by the better educated classes’ (Wilentz 1984, p.272).
• Writing about the founding of mechanics’ institutes in America, Stevens (1990) described them of promoting practical and scientific knowledge and supporting an ‘upward mobility of that broad class of workers called mechanics’ and were the ‘great democratic leveller...for social mobility’ (Sinclair p.528).

• It was noted by a contemporary in 1836, that mechanics in Philadelphia were now able to read, reflect and investigate.

• As in Britain, by the min-nineteenth century, science was popularised in American institutes through evening lectures and classes which encouraged not only the skilled mechanics but also apprentices and working men.
During the late 1820s and early 1830s both Britain and America had a common supporter in Timothy Claxton. He was a self-educated London artisan who promoted mechanics’ institutes and similar institutions in both countries. He studied mathematics and drawing in his own time and had built several scientific instruments. Claxton has tried to establish a philosophical society for mechanics but it failed. He also applied for membership of an established philosophical institute but was turned down as he was ‘only a mechanic’. He moved to the States during the 1820s and in 1826 established the Boston Mechanics’ Institution. By the 1830s he was co-founder of the Boston Mechanics’ Lyceum, established especially for artisans (Kett 1994, p.113).
• Samuel Vaughan Merrick who realised, having inherited a bankrupt mill, that he had little technical knowledge and called upon relatives, one who had studied under the chemist Joseph Priestly in Britain, to support the foundation of the Franklin Institute in Philadelphia for the purpose of developing his and others workforce to support industrial needs (Kett 1994, p.114). The Franklin Institute was founded in 1824 and Sinclair (1974) states that it was modelled and organised on the ‘mechanics’ institutes of Great Britain’ (Sinclair 1974, p.3).
• The Working Men’s Institute of New Harmony in Indiana, was founded in 1838 by William Maclure who was born in Ayr, Scotland.

• He travelled throughout Europe and then visited the United States in his capacity as a British merchant. In 1800, Maclure became an American citizen.

• While on business in England, he visited Robert Owen’s cotton mills and New Lanark model village and believed that something similar for the education of adult learners to those available in New Lanark should be established back in America (Doug 1991, 404). Maclure would also have been aware of the British mechanics’ institute and their libraries.
Maclure opened the New Harmony Working Men’s Institute for Mutual Instruction on 2 April 1838.

The aims of the Institute was to bring scientific and useful knowledge within the reach of labourers through reading, lecture and scientific demonstration.

Goldsmith (1955) states that technical education in California was first introduced at the San Francisco Mechanics’ Institute in 1855. With the gold rush over and trade declining, mechanics in the town were concerned that industrial prospects were poor. The solution was to make updated technical knowledge available to them and others across all trades and industries.
• Following the end of the Civil War, which hindered mechanics’ institutes generally, and with the opportunities to expand industrial growth, the San Francisco Institute responded to this through offering classes in the new technical developments that were taking place.

• The legislation in support of establishing the University of California in 1868 made specific reference to the Mechanics’ Institute, recognising its contribution to technical education.

• Throughout the 1870s and 1880s, the Institute was offering mechanical drawing, applied mathematics, wood carving, iron work, free lectures and annual fairs (exhibitions).

• It was also offering what Goldsmith (1955) refers to as general education and what Britain would refer to as elementary education. The University staff delivered weekly lectures at the Institute similar to university extension courses offered in British mechanics’ institutes.
Like, many institutes in Britain, the Bigelow Institute tended to concentrate on advanced science courses which many find hard to understand. ‘Words like oxide and alkali meant nothing to them (artisans), and many attended lectures on science only to witness the dazzling lights and deafening explosions that accompanied demonstrations of chemistry’ (Kett 1994, p.117).

Many, notably the Franklin Institute and Ohio Mechanics’ Institute patrons saw them as keeping ‘apprentices and journeymen out of taverns and others habitats of vice’ (Kett 1994, pp.117 - 118). This too as seen as an aim in the British institutes, particularly those supported by the Temperance Society.
During the second half of the nineteenth century, British mechanics’ institutes continually adapted to supporting vocational education and training, including elementary education for men, women and children, as well as establishing technical schools and schools of design, all of which were run as voluntary organisation and charging fees.

In contrast, American Institutes seem to have reverted back to scientific centres of learning for those who had attended schools. In any case, the majority of people in the States had now access to free schools and libraries.
• Both Britain and America had a common supporter in Timothy Claxton. He was a self-educated London artisan who promoted mechanics’ institutes and similar institutions in both countries. He studied mathematics and drawing in his own free time and had built several scientific instruments.
• He tried to establish a philosophical society for mechanics but it failed. He also applied for membership of an established scientific society but was turned down as he was ‘only a mechanic’.
• Claxton moved to the States during the 1820s and in 1826 established the Boston Mechanics’ Institution. By the 1830s he was co-founder of the Boston Mechanics’ Lyceum, established especially for artisans (Kett 1994).
• In 1826, James Smithson, an English scientist left $500,000 in his will to the United States government to establish and fund an institution ‘for the increase and diffusion of knowledge’ in Washington, D.C.

• In 1846, the Smithsonian Institution was opened and the building housed a museum with geological and mineralogical specimens, a chemistry laboratory, art gallery, lecture rooms and a library.

• Over a period of time, the Smithsonian libraries expanded into 22 branches, being located in various Smithsonian institutes in Washington D.C., New York City, Edgewater, Maryland and the Republic of Panama.

• During the 1840s, museums with geological and mineralogical specimens, chemistry laboratories, art galleries and libraries were becoming important features of British mechanics’ institutes.
• Subscription libraries, factory libraries and mechanics’ institute libraries supported the access to books for all sections of society in both America and Britain with the increasing demand for books and the prohibitive cost for many in purchasing their own (Wiegand and Davis 1994).

• Unlike libraries in Britain which were only slowly becoming public libraries sometime after the passing of the Public Libraries Act in 1850, in America it was common for funds to be left in wills to fund free public libraries from a much earlier period.

• The Carnegie Libraries connection......
Keighley Institute and Carnegie Library
West Yorkshire
• A distinct difference between America and Britain was that some American institutes reinvented themselves as lyceums, offering lectures in science and attracting members of the public who had more than a passing interest in popular science rather than scientific knowledge in support of their trade in industry (Kett 1994).

• They seem to have been more popular in America than Britain, where in the case of the latter; they were generally associated with places of entertainment (Bode 1959).
Summary

• British examples informing America,
  Success of Glasgow and London
  Media
  Dickens
  Merrick
  Maclure
  Claxton

• American examples informing Britain
  New York supported Liverpool MI with gifts and best wishes,
  Smithson
  Carnegie

Trans-Atlantic Dialogues informing adult education
Questions?

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