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Yap, Ernie

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Rebels and Innovators: Lord Lister of Edinburgh and Dean John Stewart of Cape Breton

By

Ernie Yap
Dalhousie University

Abstract

In almost every biography of the great Joseph Lister (1827-1912), the “Father of Antisepsis,” the name of John Stewart is mentioned. Dr. John Stewart (1848-1933) was Lister’s Chief Resident and close friend who himself contributed greatly to the development of antisepsis in both the United Kingdom and Canada. He later became Dean of Medicine at Dalhousie University. John Stewart’s father, Murdoch Stewart, was a scholar in Theology and missionary to the island of Cape Breton, Nova Scotia, in 1843. In his twilight years, he wrote an unpublished memoir which was only recently discovered and transcribed.

We investigated the memoir which gives a vivid description of 19th century Nova Scotia from the eyes of a European immigrant. More importantly, we discovered some striking parallels between the lives of John Stewart and his mentor, Joseph Lister. Both were pioneers – endowed with a rebel streak and innovative spirit. Lister persisted in his antisepsis ideas against considerable opposition; John Stewart shared this quality of persistence. He volunteered as army surgeon in the 1st World War at the age of 67. Both came from intensely religious backgrounds, from whence they derived their conviction that their labours were divinely inspired. Lister had strong Quaker roots and Murdoch Stewart’s memoir reveals fervent Calvinism in the Stewart household.

They also had a great career and medical education in common: Lister gave landmark lectures in both Edinburgh and London, which had few parallels. John Stewart’s inspiration too many was well documented in Canadian archives. Both had influential scholarly fathers. Lister’s father, Joseph Jackson Lister, was a scientist who invented the compound microscope. An examination of Rev. Murdoch Stewart’s journal helps reveal the essence of his son who played a pivotal role in the life of Dalhousie Medical School and the development of antisepsis in Canada.

Introduction

Murdoch Stewart (1810-1884) was born in Contin, Ross-shire, Scotland on May 18th, 1810, the youngest of seven children; to John and Catherine Stewart. He came to Nova Scotia in 1843 and sailed on the *Arichat Packet* to Cape Breton on the 25th of July, 1843, to serve as an itinerant missionary there. He did travel back to Scotland once to get married but spent the rest of his days Whycocomagh, Cape Breton, though he later moved to Truro, Nova Scotia where he died at the age of 74.

On July 4th, 1847, Rev. Murdoch Stewart became the father of John Stewart who later was made the Dean of Medicine at Dalhousie University, Nova Scotia, in 1919. Dr John Stewart is fondly remembered as a pupil, friend and confidante of

Sir Joseph Lister and was credited for introducing Lister's antiseptic ideas to the operating theatres of Canada.

Rev. Murdoch Stewart's Unpublished Memoir

Rev. Murdoch Stewart wrote an unpublished memoir which was transcribed in 1997 by a distant relative, Mrs. Leita Askew. The memoir itself is about 40 foolscap pages long and gives many interesting insights into his life as well as snapshots of 19th century Scotland and Halifax through the eyes of a first generation immigrant. We investigated the contents of the memoir in an attempt to decipher the conditions in which Dr. John Stewart was molded; as well as draw parallels between the lives of John Stewart and Joseph Lister (1827-1912) (of whose background is widely available) to appreciate the elements in this comradeship that brought Canada to the forefront of antiseptic surgery well before other nations.

Rev. Murdoch Stewart's unpublished memoir also deals with the writer's early life, his family tree and his thoughts on *The Scottish Disruption* and his arrival in Canada. The original script was handwritten, natural on a 7' x 5' leather-bound book. The script slants to the right, is small and is quite legible except in instances of excitement or fatigue as suggested by long uninterrupted passages. The ink changes only after six or seven pages, suggesting an experienced and efficient writer or frugality. It is currently housed at the Nova Scotia Public Archives in Halifax.

The memoir begins with the author's introduction of himself as the present Minister of the Gospel at Whycomah, Cape Breton, Province of Nova Scotia, Dominion of Canada in connection with the Presbyterian Church of the Lower Provinces of British North America and that the writing of the memoir was begun on April 25th, 1872 (the writer's age was 62 years). He then stated that he chose to call the memoir his "Memoranda" and was of the opinion that it would not be of interest to anyone beyond his family. Also, it was not meant to be a testament of his achievements and thoughts. The disclaimer was then suffixed by the Apostle's Creed "[...] *that I am a great sinner trusting in a Great Almighty. [...] believe in the Lord Jesus Christ & thou shalt be saved*".

So why did he embark on this arduous project? (Murdoch Stewart was, at that time; by his own admission, suffering from constant headaches and weakness). He gave two reasons:

- 1) He wished to leave to his children all that he knew of their roots, fearing that he might not be able to retain them soon. He reminded the reader that he will be 63 years old.
- 2) An incidental publication of a letter in *the Invergordon Times* (a now defunct Scottish daily) dated 20th November, 1871 referring to the death of eminent geologist Sir Roderick I Murchison (1792-1871). It made mention of Murdoch Stewart's eldest sister Isabella and his maternal uncle, Murdoch Stewart.

Despite this, we observed later he extrapolated on his objectives above, to include his early life and subsequent missionary calling.

From Murdoch Stewart's *memoranda*, I examined the famous Lister-Stewart comradeship (despite a 20 year age difference between them) by looking at three facets of their lives:

- Fathers
- Achievements
- Religiosity

Fathers

Joseph Lister's (1827-1912) father is Joseph Jackson Lister (1857-1927), a noted natural scientist and inventor of the compound microscope; an improved model of the first prototype proposed by Anton van Leeuwenhoek (1632-1723). Despite this, Joseph Jackson Lister was a merchant by trade and had no university education or formal scientific training. He was cited in many biographies of his son as being the primary influence in his early and academic life. Joseph Lister was his only son whom he begot at the age of forty-nine.

At about the same time when Joseph Lister Sr.'s career as a businessman and amateur inventor reached its zenith, in upper north Scotland, Murdoch Stewart as a newly minted minister was embroiled in *The Great Disruption of the Presbyterian Church*. It was a movement led by Thomas Chalmers (1780-1847); whose splinter group, the Non-Intrusionists was championing the independence of the Church from the State. The Great Disruption culminated in the formation of the Free Church of Scotland. Thomas Chalmers' splinter group only had 450 members, of which Murdoch Stewart was a great supporter (he was not yet ordained when the tremors were felt and he was already in Cape Breton when the Disruption officially began). He wrote in his *Memoranda*:

No one could then tell how it might fare with the Free Church which was expected to be set up. Trials & difficulties were certain – want of adequate support very probable [...].

And indeed, family members of the four hundred and fifty Free Church members suddenly found themselves losing their commissions or getting reduced salaries. Yet the thirty year old Murdoch persisted in his stance. Such persistence was reflected in his son John Stewart (1893-1952), who at the age of sixty-seven, left an illustrious academic position in Halifax, Nova Scotia to volunteer in the trenches of the First World War.

Amidst the rumblings of the Disruption, Murdoch Stewart decided to become a missionary:

I wrote in December 1842, to the Colonial Commission saying that I would be at their disposal next May to go to any of the Colonies to which they might choose to send me. I thought if I left Scotland, it would not matter which part of the world I might go.

Such bold declaration was later tempered with a dose of reality when the Colonial Commission wrote him back, commissioning him to Cape Breton.

Now if there was any place to which I would be more unwilling to go than another, it was Cape Breton, little was known of it in Scotland then, & that little gave it a bad name.

And later,

[...] and to my mind the leadings of Providence in this matter were remarkable [...] alluding to a series of catalyzing events, one of which was the sponsorship of his commission by a known philanthropist in the missionary circle.

Murdoch Stewart set out for Halifax aboard the *Caledonia* and reached Canadian soil on a Sabbath morning in June 1843. He was greeted and hosted by Alexander Keith (1795-1873) who in a few months time would be mayor of Halifax.

Achievements

Joseph Lister as Peer, Surgeon and Inventor has been well documented. Following up on Louis Pasteur's (1822-1895) publication on fermentation, he postulated and proved the role of microorganisms in the pathogenesis of wound infections. And then he proposed the strategy known today as antisepsis to eliminate these microbes. Lister was also one of the first proponents of hand-washing and wearing clean gloves; against a tradition that extols the "surgeon's coat" on which the amount of grime and blood denotes one's experience. His series of papers *Antiseptic Principle of the Practice of Surgery* (1867) serves as monumental milestone in the history of modern surgery.

He entered with zeal into student politics and the debating society, heading a sharp attack on the hometopaths.

The above statement about Lister's early life paints a picture of a sharp-tongued, quick witted orator well endowed with a skill necessary to ward off the hostile reception to his antisepsis ideas in future.

In comparison, Dr. John Stewart's works and contributions are well documented in the local literature:

[...] he came as an apostle of the New Antiseptic Surgery, and to its (Nova Scotia) people he has given more than fifty years the benefit and blessing of his skill and knowledge [...]

From the beginning of his career he took a great interest in medical education, and has been for many years associated with the faculty of Medicine of Dalhousie University.

Religiosity

Religion played a central role in both men's lives. As both John Stewart and Joseph Lister spent considerable time with their fathers in childhood, it is not surprising to see them emulate their forebears in their spirituality also.

Joseph Jackson Lister was a member of the *Society of Friends or Quakers*, a denomination which preaches equality and a non-sectarian form of Christianity. Joseph Lister was very much influenced by Quakerism in his childhood. He, however, later became an Episcopal when he married his wife who was not a Quaker, and Lister has been described as intensely religious towards the end of his life.

From the Memoranda we know that Murdoch Stewart was as much a minister at home with his children as he was in the pulpit. At least one of his sons became a Doctor in Divinity. We know that Dr. John Stewart, though never expressly religious in public life, was an active contributor to the *Nova Scotian Bible Society* and encouraged evangelism in his private life. The Stewarts were Presbyterians, a branch of John Calvin's (1503-1564) Protestantism.

Conclusion

In conclusion, we have been able to examine the lives of two giants of their time, the advent of antisepsis and the scenario of 19th century Nova Scotia through the meticulous observations of a missionary/immigrant.

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