C'est d'ailleurs pour cette raison que l'introduction et le début du premier chapitre soulèvent plusieurs questions qui mériteraient des développements trop longs et nuancés pour pouvoir prendre place ici.

On peut à la rigueur accepter que les représentations picturales - pour employer les mots de l'auteure - emprisonnent le paysage de Charlevoix dans le passéisme et l'immobilisme alors qu'elles « ne correspondent pas au paysage tel qu'il est reflété par l'examen des relations entre la population et le territoire ». Toutefois, on en est encore ainsi. Lorsqu'un peintre pose son chevalet devant une grange ou une maison traditionnelle, dans une rue ou sur le bord d'une rivière, sa préoccupation est d'ordre plastique et non géographique.

C'est pourquoi je me demande s'il suffit de quelques dizaines d'illustrations anciennes et de quelques textes pour affirmer que Charlevoix constitue un « paysage mythique qui transcende l'espace ».

Richard White, Gentlemen Engineers:
The Careers of Frank and Walter Shanly

LARRY McNALLY


Richard White has written an excellent biography of two important nineteenth-century Canadian engineers, Walter Shanly (1819–1899) and his brother Frank (1820–1882). The Shanly family were landless Irish gentry who came to Canada in 1836 to establish their own estate near London, Ontario. The sons soon grew tired of the endless toil required and turned to other pursuits to earn a living. Both Walter and Frank decided that civil engineering was a suitable career for “gentlemen.” They became engineers by working under established engineers on various canal and road projects. This training was supplemented by extensive reading of engineering books. This book is about how these two brothers and their expectations fared in Canadian engineering in the second half of the nineteenth century.

Though White concentrates on the Shanlys’ relationship to engineering and their social status, he does provide quite a large amount of technical data on their engineering projects. He tells us what the Shanlys were doing and why. Much of this information comes from the extensive Frank Shanly fonds in the Ontario Archives. White puts these details into the wider context of engineering and railway history, making this book suitable for readers with an interest in material history.

The Shanly brothers are a good example of nineteenth-century engineers who produced physical works that still exist today. They worked either together or separately on projects such as the first Beauharnois Canal, the Bytown and Prescott Railway, the Northern Railroad of New York (Ogdensburg Railway), the Union Canal in Pennsylvania, the reconstruction of the Northern Railway (Toronto to Collingwood), the Hoosac Tunnel in Massachusetts, the Toronto, Grey and Bruce Railway, the Canada Air Line and many others. In some cases, the projects they worked on have left few remains such as the first Beauharnois Canal or the Northern Railroad of New York, which was abandoned in the late 1950s. For others, the structures they designed or built are still being used for their original purpose. For example, the Shanlys took over the unfinished Hoosac Tunnel in 1868 and using the new technologies of compressed air drills and nitroglycerine for blasting, completed the tunnel in 1876. It is still being used for its original purpose as a railway tunnel.

The Shanly project that has left the most physical remains is the Toronto and Guelph Railway, known after 1853 as the Western Division of the Grand Trunk Railway (CTR). Walter was chief engineer of the railway and Frank its resident engineer. The general contractor was C. S. Gzowski and Company. Casimir Gzowski was an experienced Canadian engineer and contractor who knew what he was doing. According to the contract, Walter Shanly was to be supreme authority concerning
engineering issues, but in reality he and Gzowski had to compromise on the engineering details. In spite of this rather awkward arrangement, the quality of work on this branch was recognized as being significantly higher than on the rest of the GTR.

The physical remains of this railway fall into three categories: the railway line itself, bridges and viaducts and finally the stations. The location of a railway line was of prime importance since it affected both construction and operating costs. White has an excellent description of how Walter and Frank worked for nine months in 1852 to survey three possible routes and then chose the best one. They did a good job because the present day CN line from Toronto to Guelph still uses the line that was chosen almost 150 years ago.

Water crossings ranged from small culverts to long bridges and viaducts. Much time and money was spent on building proper culverts that were largely invisible but were vital to the safe functioning of the line. Major bridges and viaducts were another matter. Here was a chance to use technology to produce impressive results. The line had to cross the wide valleys of the Humber, Credit and Grand rivers of which the Credit River was the widest. Originally Walter had designed a high timber trestle, but when the GTR took over the railway, it was decided to use brick piers. Instead of using expensive brick arches between the piers, the GTR took advantage of recent British experiments with long built-up wrought iron box beams. The Credit Valley viaduct was composed of seven 115-foot [35-metre] piers supporting eight 96-foot [29-metre] wrought iron beams seven feet square [0.6 metres square]. The tracks ran along the top of the beam rather than inside of it, as in the Victoria Bridge. This viaduct has been held up as an impressive example of nineteenth century railway technology. In spite of the replacement of the wrought iron beams with steel ones and rebuilding one abutment in concrete, the viaduct still looks and functions as it was designed.

Stations were another class of railway structures that have survived. Stations in small towns, if properly designed and built, could last a long time. It was the stations in major centres that became too small and had to be replaced. The GTR built quite a number of standardized stone stations between Montreal and Toronto and it was decided to erect similar stations between Toronto and Guelph. It was the demolition of a number of the Montreal-Toronto stations in the 1970s that provoked an outcry, eventual recognition and their preservation. Remaining stone stations on the Guelph line include the ones at Georgetown and St Mary's.

This book has a lot to say about the Shanlys' relationship with the engineering profession and with their social and financial status. It also has a lot to say about engineering in mid-nineteenth-century Canada. White is able to clearly describe what engineers did and why. In doing so he takes a lot of the mystery out of engineering and railway building, making it understandable to readers. Let us hope that this book will appear in paperback some day, making it less expensive and more available to people interested in the subject.


DELPHIN A. MUISE


History has become part of Canada's everyday public discourse. Most discussions revolve around the capacity of schools, universities and other public agencies to render our past significantly enough to ensure the nation's future and advance various political attitudes or reflect Canada's diverse experience. Who owns history and how ownership is to be exercised for transmission from generation to generation underlies much of the discussion. Everyone acknowledges heritage has the potential to contribute to the nation's political future. How much it will pander to popular