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TURNING AN ENGINEER INTO AN AUTHOR

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Abstract

This paper tells the story of an engineer who became the author of three books on the history of transportation in the province of British Columbia. It takes the reader through the background to this activity, the kinds of research and documentation that were needed to do the writing, what happened after publication, and some of the joys, problems and frustrations that were experienced along the way. There is some advice offered by the author to other engineers who might attempt historical publication. There is also an appendix that includes the transcript of one of the most significant reports written in the early days of transportation in the province, together with the author's comments on it, and - at the request of the editors - the transcripts of four published reviews of the three books. Finally, there is a short bibliography.

This paper is based on the guest lecture presented by the author at the dinner of the Fellows of the Canadian Society for Civil Engineering held in Victoria, British Columbia, on 30 May 2001 prior to the 29th Annual Conference of the Society.

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The editors for this present Working Paper were Peter R. Hart and Andrew H. Wilson.

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Robert G. Harvey

About the Author

Scottish born, Bob Harvey graduated in civil engineering from the University of Glasgow in 1943. He went straight into the British Army and served until 1947 in England and India, seeing active service with the 14th Army on the Burma frontier. After the War he emigrated to Canada and in May 1948 joined the Department of Public Works of the province of British Columbia. For the next ten years he was a ubiquitous engineer-in-training, district engineer and regional maintenance engineer with responsibilities over this period for provincial roads in various parts of the province. In 1958 he was appointed regional highway engineer at Prince George and became responsible for all provincial roads north of Williams Lake. He moved to Victoria and the Ministry of Transportation and Highways headquarters in 1967, where his responsibilities increased further. He was appointed deputy minister in 1976, and retired from this position in 1983.

After retirement, Bob began researching and writing his three books - and found publishers for them. They won him a certificate of merit from the B.C. Historical Federation. In May 2001 he received the W. Gordon Plewes Award of the Canadian Society for Civil Engineering for "his many contributions to the preservation of the history of transportation in British Columbia."

In 1950, Bob became a professional engineer licensed to practice civil engineering in B.C., and he is a life member of the professional association of the province. He is a life member of the Transportation Association of Canada.

Introduction

The transformation in the title of this paper involved three things - a book, a valley and a highway. The book, the first by the author, is entitled *The Coast Connection*: so named because it describes the connection of the interior plateau of British Columbia to the Pacific coast by a series of roadways. The first of these was completed as early as 1863 when British Columbia was still a colony. They all emerged from the mountains at a place called Hope. This small town is now the springboard for three modern highway routes to the interior of B.C. from the lower Fraser Valley - the Trans-Canada Highway through the Fraser Canyon, the Hope-Princeton Highway along the international boundary and, most recently, the Coquihalla Highway. The book includes the history of all of them, but the story of the one by the Coquihalla River is its major emphasis.

This river flows swiftly for most of the year. In the spring it carries the melt of the winter's snow trapped by a circle of mountains at its headwaters high in the Cascade Mountains, which also block the flow up the valley of the rain clouds sweeping in from the Pacific, causing more precipitation at times of higher temperatures in the form of rain. In fifty miles it descends about 5000 feet. As well as being enriched from the skies, the Coquihalla Valley is immersed in transportation history.

When the British Government made the disastrous decision to cede Oregon to the United States in 1846, the fur traders of the Hudson's Bay Company had to find their own way through the Cascades to Hope. Previously, to get their furs to market, they had gone by the Columbia River, but the lower two-thirds of that river was now denied them. They tried the Coquihalla Valley, but it proved to be too difficult, although they used it in part. The valley was finally used for transportation throughout its entire length by a trail built in 1875 for the movement of cattle from the huge ranches, then coming into existence in the interior, to the market for their beef at the mouth of the Fraser. In 1916 the trail was superseded by a railway down this valley which, in turn, fell into disuse in 1954.

Seemingly destined never to be left alone, the course of the river was once more intruded upon - this time by three pipelines, two for oil and one for gas - and the maintenance of these led to access roads. By the mid-1970s there was a road through the Coquihalla Pass (elevation 5492 ft. above sea level). It was then that the Premier of British Columbia cast his eye upon it and foresaw, not a narrow two-lane gravel roadway, but a majestic multi-lane mountain expressway, which he conceived would be his memorial to future generations.

In 1984, after a tentative start a few years earlier, Premier Bill Bennett ordered the acceleration of the building of a super-highway through one of the most difficult mountain ranges in North America, from Hope to a town called Merritt and further eastwards. The first phase, Hope to Merritt (75 miles) was to be completed by 1986 to coincide with the World's Fair to be held in Vancouver that year.

All of this led to the emergence of this engineer as an author. His first book contains a complete and compelling description of the design and construction of the Coquihalla Highway and of the events that followed its completion. It has been followed by two more books encompassing railways and river boats in British Columbia as well as roads. The details of this emergence were first described

in the guest lecture I presented at the dinner of the Fellows of the Canadian Society for Civil Engineering held in Victoria in May of 2001 and mentioned more fully by the editors of this paper in their introductory material.

From Engineer to Author to Historian....How it Happened

Before I go into details of how I became an historian in British Columbia, I should say a word about some of those who really knew what they were doing in this field.

Two groups have dominated. The first is the academic fraternity: the university professors. The acknowledged bible of historical writing in B.C. is a book by Margaret A. Ormsby, who was a professor of history at the University of British Columbia. It is called *British Columbia: A History*. This great book was commissioned by the provincial government to mark the centenary of the province in 1958. Margaret Ormsby died a few years ago but her book has remained unsurpassed, in my view, as the leading history of this province and it has been a wonderful help to me in my writing.

Still with academics, there is a husband-and-wife team, both professors: Gordon and Helen Akrigg. They produced two remarkable volumes relating pre-colonial and colonial history, *The British Columbia Chronicles*, covering the years from 1778 to 1871. They also produced a handy helper for those studying B.C. - a book called *1001 British Columbia Place Names*, which has had repeated editions. It not only lists a huge number of place names but gives a few paragraphs, or half a page, on the history of each. This is a priceless help to anyone writing about our province.

The second group is one that I call the "institutional historians." These are writers who are employed by such institutions as the British Columbia Museum, the Provincial Archives, and our provincial newspapers. Leading among them is Robert D. Turner, a museum curator. He has produced a magnificent history of sternwheelers and steam tugs - mostly those of the Canadian Pacific Railway. He has also written about the *Princesses*, the CPR coastal vessels, and the *Empresses*, the passenger liners that sailed around the world under that company's flag.

Turner's predecessor in the field of river and lake transportation in the province was Norman Hacking, who was for many years the marine editor of the newspaper, the *Vancouver Province*. He also wrote a wonderful series of articles for the *British Columbia Historical Quarterly*, a provincial government publication, now moribund. Hacking entertains us with his colourful accounts of the sternwheelers and of the men who piloted them on the lakes and rivers of our province.

These academic and institutional authors had one great help in their efforts: they were professionals in what they wrote about. Ormsby and the Akriggs were generalists, each in their own format. Turner and Hacking were specialists in the marine field. All of them helped me greatly to develop my theme, which was consistent throughout all of my books: the history of the various transportation corridors through the mountains and plateaus of the interior of British Columbia.

I met only one other civil engineer in the course of my writing. He was a bridge engineer from Vancouver, R.C. Harris. Richard Harris died a few years ago. He was what I call a "small turf" historian: he specialized in the fur brigade trails across the Cascade Mountains and little else. He viewed my words on these trails with a piercing gaze, believe me, and quickly made me aware of any inaccuracies! Through our correspondence we became friends and I conceived a great admiration for him.

Harris wrote an excellent article about the first Alexandra Bridge over the Fraser River, which appeared in the *B.C. Historical News* in 1982. It is the best source of information on that historic structure that I have found, and it is very well researched and presented. I was also happy to receive from him a reproduction of a report made by Sapper James Turnbull of the Royal Engineers of an exploration he made of the Coquihalla Valley in 1862.¹

I will now go on to relate how I fell in with this learned company.

One day in the late 1970s I was sitting at my desk in the Highways Department in Victoria when the phone rang. It was Premier Bill Bennett. He told me that his brother and sister were both members of the Kelowna Chamber of Commerce and that it was having its Annual Meeting in a week or two. They wanted someone to talk about the Okanagan Highway. He asked me if I would do it. Well, you don't turn down premiers, so I agreed.

I got a hold of our chief clerk, Frank Howland, and told him to bring me everything he could find about the Okanagan Highway. He had started in Highways when he was 16 years old and was then on the brink of retirement. There was very little he did not know about highways in British Columbia! Frank soon walked in with a stack of file folders about four feet high. I was amazed to find that this included some dating back to the start of the Department of Public Works in 1908. When I enquired about any other files he had, such as for the Fraser Canyon Road, he observed that the file for this road included correspondence with the Canadian Pacific Railway going back to the 1880s and earlier. I had asked for background on a highway and had received historic documentation going back a hundred years!

¹ The report is annotated "Glenbow Archives. Edgar Dewdney Papers." The discovery of it is typical of the completeness of Harris's research. It was accompanied by two sketch plans and it shows that Sapper James Turnbull, who wrote the report, scouted the Coquihalla River, Cedarflat Creek and Dewdney Creek, and Sketch 1 shows them to their sources. He also climbed Tulameen Mountain (7500 ft.). Sketch 2 shows the Upper Coquihalla Canyon very well. It indicates a snow depth of 8 ft. in early May, and it mentions an Indian camp half-way up. The maps are entitled "Sketch of Exploration from Hope. Explored and Sketched by Jas. Turnbull dated 21 April to 12 May 1862." The scale was 1 inch to 1 mile. Avalanche tracks are marked and ground elevations are noted. Sapper Turnbull hiked 120 miles through the roughest of terrain and climbed about 3000 ft. to a mountain top. He took elevations throughout and made notes for sketch plans. He did all of this in 21 days. Turnbull started off up the Coquihalla on the mule trail constructed by a party of Royal Engineers accompanied by civilians from Hope in 1859, as reported by Capt. A.R. Lempriere, R.E., and reproduced on pages 36 and 37 of *The Coast Connection*. Harris also included a reproduction of a plan of the trail built up the Coquihalla Valley in 1875, signed by the Chief Commissioner of Lands and Works, Robert Beavan. A transcript of the Turnbull report - but not the sketches, which did not reproduce well - has been included in the appendix to this present paper.

When I expressed my wonderment, he said, "Well, you had better enjoy it now because this material will not be with us for long!" When I asked him why, he told me of a program to microfilm old files, and then to destroy the originals. He showed me the reproduced images from the Hope-Princeton Highway file, which had been done already, and we both agreed that they were dreadful. This was being carried out by another ministry and people were making decisions in ignorance about what should be kept and what should be discarded from among documents of great historic value.

We decided that this was not good enough. Frank said, "You tell me which of these old files you want kept and I will simply hide them." He said we should only keep those from before the last war, and I agreed. I gave him a list and cautioned him to pass on the details of his hiding place to his successor.

My talk in Kelowna was given and seemed to be well received. Some years later, in 1983, I retired and my erstwhile minister and good friend, Alex Fraser, gave me some assignments to cushion the shock of idleness. One task was to monitor the construction of the Coquihalla Highway and to write a report on it when it was finished. I had been in charge of the initial planning and design of it. This is an excellent highway, quite remarkable. Since it opened, it has been a wonderful money-maker for the British Columbia politicians as a toll facility. In fact, in not too many years it will probably recoup the millions that were wasted on the fast ferries!

I wrote my report and filled in some history from Frank's files, which I retrieved from his hiding place and took home. I eventually returned them with the recommendation that they be handed over to the Provincial Archives. I will not go into what happened with the Coquihalla Highway. This is not the place for that. All I will say is that, eventually, Alex Fraser returned my report to me and gave me his permission to use it as I pleased.²

It was not long enough for publication on its own, so I had the bright idea of combining it with the history of similar outlets to the coast from the interior of the province - the Hope-Princeton Highway, the Fraser Canyon Highway, and so on. In this way my first book, entitled *The Coast Connection*, was born. In its first conception, it was a rebuttal of the criticism of Bennett's highway by Bill Vander Zalm, but as the writing progressed I leaned more and more towards a more historical approach. Anyway, I think I was successful historically because, in 1995, I received an award from the B.C Historical Federation - a year after the book came out. Lo and behold, I was now not only an author, but also an historian!

When you have done something once, it is much easier to do it again. So after things settled down, I started on my next book, which the publisher turned into two. I widened my field to include railways as well as highways, and I also included these remarkable old river boats, the sternwheelers

² The political side of the building of the Coquihalla Highway and the inquiry conducted by Douglas L. McKay, P.Eng., are described in Chapter 9 of *The Coast Connection*, pages 199 to 207. They are also covered in two weekend articles by Jim Hume in the *Victoria Times-Colonist's* editions of December 1 and 8, 1990, and in Hume's review of the book in the same paper's edition of 14 July, 1994.

- a wonderful part of B.C.'s transportation history. I also covered the whole province.

These two books, both entitled *Carving the Western Path, by River, Rail and Road*, emerged in 1998 and 1999, the first subtitled as covering B.C.'s southern mountains and the second relating to central and northern British Columbia. The titles, incidentally, were the publisher's, not mine. In all of this writing I made extensive use of these precious old files for which I had to thank Frank Howland.

I also had second treasure chest of facts and figures from the past, for which I had to thank another old-timer, Henry Thomas Miard, once my deputy minister. Tom hired two university students for summer work one year. He had the brilliant idea of putting them into the Provincial Archives in Victoria and told them to dig out all the information they could find about the history of the Highways Department. He also told them to make copies of all the documents they could uncover, especially the very early ones. The result was a loose-leaf folder about two inches thick, full of photostat copies, and Frank threw this in along with the files.

Most of this early material from colonial and early provincial days was hand-written correspondence, finely scribed, rather poorly reproduced and very difficult to read. It took a great deal of time to go through, but I had lots of that commodity in my retirement, so I went through every page. I acquired a computer and, with it, printed out everything for easier reference. This material proved to be a godsend when I got further into my writing. In this way, I acquired the ingredients that you must have if you want to get into this business of writing history - facts and information - and preferably the correct facts and the right information. This is an essential part of writing non-fiction, believe me. If you don't have the material, forget it!

I started off with the old files and records, which I have already described, and added to these by reading, reading and reading. I even took a course on how to read quickly, which - believe it or not - has been a great help. I was also fortunate to be living in Victoria. The main public library there is a wonderful source of information on the history of the province. And I had still more luck. A neighbour of mine, when I first moved to Victoria, was an old Mountie. He had served all over British Columbia during a career that extended over forty years and everywhere he went he had collected books about that area of the province. When he died, his wife very kindly gave all of these to me. Many of them were long out-of-print. A marvellous help to any writer of B.C. history!

The bibliography of each one of my three books extends to sixty volumes or more. Allowing for overlaps, I must have read about one hundred and fifty books - mind you, over a period of about six years. Some of them I only perused in part, but I read most right through. I not only read them, I carefully noted and referenced everything I took from them - and here I should tell you something about this business of referencing.

When you write about history, you cannot simply state a fact and let it rest at that. If you do, the other historians will say that you have made it up. You have to indicate where you learned that fact. I will give you an example. In *The Coast Connection* I reported that Colonel Moody of the Royal Engineers walked out into the Cascades one day and looked at Allison Pass, which had just been

discovered by John Allison. He then wrote to Governor Douglas and observed that it would be a good way through the mountains for a railway. I then had to append a tiny superscripted number, which referred to the same numbered entry in the notes for that chapter, and in these notes I wrote, "Letter dated August 23, 1860, from Lieutenant Colonel Richard Moody, R.E., to His Honour, Governor James Douglas. Department of Lands and Works File 151, letter written at Hope, B.C." This was one of the letters I had tediously transcribed.

I also visited the Provincial Archives, and did this many times, to research documents on such subjects as the Alaska Highway in British Columbia. I searched their visual record files for photographs, using their computers, and also my own *via* their Internet connection. I found many photographs that way, for which I paid their reproduction fee and got their permission to publish. These photographs had to be fully referenced. Interestingly, several had been wrongly filed in the first place.

And What Happened Afterwards....

Well, I wrote my first book and it was published, and then the reaction set in. I got letters! I know how fortunate I am - as I need only tell you about those that I choose to mention. The ones I don't want to talk about came from those delightful correspondents whom I call "nitpickers," and believe me there are lots of them, and every author hears from them! One even took me to task because, in my book, I had failed to modernise the name of a town. I had spelled Spences Bridge with an apostrophe, such as it was written in the very early days, but still not early enough, apparently. I was told that in the year 1900 the Cartographers' Association of Canada had outlawed the possessives in place names in our country and my context was a few years after that. So my apostrophe was out of order!

About all of this, I always think of the movie *Some Like It Hot*. Comedian Joe E. Brown falls for Tony Curtis, who plays a female in the film, and he constantly proposes marriage. Curtis finally explodes and says, "For God's sake, I can't marry you - I'm a man!" Joe just beams at him and says, "Nobody's perfect!" And nobody *is* perfect, certainly not a man writing his first book. I know that!

But the letters I received were not all bad. I did get some nice ones, especially one from a lovely old lady from Penticton. She wrote and told me that she enjoyed my book and particularly the mention of the Royal Engineers - that adventurous band of civil engineers and sappers who built the first Fraser Canyon Road before there was even a province of British Columbia. This lady, Mrs. Kathryn Buchanan, told me that when she was a little girl, in 1923, her parents took her to Penticton for a holiday, and when she walked back and forth to town she got to know a very old lady tending her garden. They conversed, and the lady told her that she was the widow of Lieutenant Henry Spencer Palmer of the Royal Engineers.

Palmer was the point man for Colonel Moody. It was Palmer who explored the new colony with the Hudson's Bay men. He sought alternative routes to the coast from the interior and he wrote a very fine report of his trip from Fort Alexandria to Bella Coola, following in the footsteps of Alexander Mackenzie. As did other officers of the detachment, he found a wife in the colony and he took her with him when he left in 1863. Palmer later died in the Philippines and his wife, a clergyman's daughter, returned to British Columbia. That fine lady, sixty years later, confided to my correspondent that, when they were married, Colonel Moody gave them a choice of wedding presents. One was an oil painting, the other a tract of land. As they were leaving the colony they chose the painting. The land is now a large part of Stanley Park!³

When you get a letter like this, it gives you a very odd feeling. You think you are stretching out your hand - a hundred and forty years back into the past - to the very start of this province and into the time of its wonderful pioneers. The hand that wrote that letter touched the hand of Lieutenant Palmer's wife!

Before I tell you of the next interesting letter that I got, I have to tell you about the man who was involved in it. He was an Irishman called the Irish Prince, or else Big Mike, otherwise Michael J. Haney. Starting off as the labour boss for Andrew Onderdonk, building the main line of the CPR from Port Moody to Craigellachie near Revelstoke, Haney soon became the mainspring of that great effort.

Far ahead of his time, he introduced the pre-fabrication of bridge parts to speed the work, which it did. When they reached Craigellachie, they should have gone much further but they ran out of rails!

³ A letter such as this revives an author's faith in his work after it has been published. It is notable how Kathryn's mother instilled in her, at a very early age, an interest in the history of her home province and the features of it, such as the difficulties of travel in the early days. This letter is in fact an historical document containing stories as heard personally by her from Mrs. Palmer, which are fascinating. The wedding presents and, of interest to the road engineer, the trip by the new bride to meet her husband in the wild interior of the colony, by horse and wagon through the Fraser Canyon, the driver a member of the first nations who imbibed constantly.

Nine Mile Canyon is mentioned, and it was without doubt the worst section of the Canyon road. It is depicted and described in *The Coast Connection* on page 133. Most touching is the account of Kathryn's mother taking Mrs. Palmer down the centre aisle at a service in Holy Trinity Church at Sapperton, the same church and the same aisle that she walked down to marry Lieutenant Palmer in 1863. The church was built by the Royal Engineers and it was apparently in just as good condition in the late 1920s as it was when built in the early 1860s!

Palmer was only 18 years of age when he won his commission in 1859. His wife's maiden name was Mary Jane Wright. She was the daughter of Archdeacon H.P. Wright, who came to B.C. with his family in 1860. This information came from an account of an interview with Mrs. Palmer by a reporter from the *Victoria Daily Colonist* in 1930. The content of this last paragraph is from *Sappers: The Royal Engineers in British Columbia* by Beth Hill, which provides much more background on Palmer.

Editors' Note: As part of his material for this paper, Mr. Harvey submitted a transcript of a letter dated September 6, 1994, from Mrs. Buchanan. It is a fairly long letter. We did not include it here since we feel that its essential information has been given by the author in the above footnote and in the main text.

Ten years later, Haney built the B.C. Southern line for the CPR from Crowsnest Pass to Kootenay Lake under contract. Over two hundred miles of railway grade through the Rockies and the Purcell Range - all done in under two years. To do this, he brought in a force of thousands of men and 2000 teams of horses. But he was not through yet. In 1898, at the height of the Klondike madness, he set forth to Skagway even before he had finished the line to Kootenay Lake. He walked over the mountains by White Pass and back to the port city. There he met with two representatives of an English financial house, called Close Brothers, and persuaded them to build the White Pass and Yukon Railway. He started off as the labour boss and ended up as the contractor of record. But Haney still had not built enough railways although, you might say, he had built enough for one lifetime. After setting up the Klondike Mines Railroad in the Yukon, he went on to build the Copper River and the Northwest line in Alaska, the most difficult of them all. This is now part of the rail line from Valdez to Fairbanks.⁴

There was a rather strange happening with Haney, and this was the source of the next letter I will tell you about. Just before he contracted for the White Pass and Yukon Railway and while still working on his contract for the CPR in the Kootenays, he changed the spelling of his surname. Just a small change - from Haney to Heney, from an "a" to an "e." I first thought it was a spelling mistake by previous historians, but it was not. He did it, and the only reason I can see for it would be to enable him to escape legal liability for contracting work for Close Brothers whilst he remained under contract to the CPR. It worked: at least it fooled Pierre Berton, who never mentions Haney again in any of his books after his Fraser Canyon work. The official history of the White Pass and Yukon Railway refers to him as Heney with two e's, but they also call him the Irish prince, a nickname *Haney* had.

After my third book came out in 1999, I got another letter. It was from Mrs. Barbara Klopfenstein who told me she was related to Michael Haney, whom she said was her great-grandfather. She wrote to say that I was the only author she had read so far to give an account of what might have happened to Michael Haney after he finished working in the Fraser Canyon. She could never find out more about him and she was confused by the altered spelling. I replied to her, but whether or not she accepted my explanation of the name change I will never know as she has not answered my last letter!⁵

It is in such ways that some of the details of the past become known, but you have to be a detective to find them, and the Haney business is not yet completely clear. It is my belief that Michael Haney lost a large part of the acclaim, to which he was due for his lifetime of building railways, all because of the change of one letter in the spelling of his surname. To me he was a forgotten figure, although

⁴ The author's book *Carving the Western Path by River, Rail and Road Through B.C.'s Southern Mountains* gives details of Haney's work in the Fraser Canyon on pages 39 through 43, 54, 69 and 114. The companion volume *Carving the Western Path by River, Rail and Road Through Central and Northern B.C.* covers Haney's - or Heney's - activities in the north on pages 150, 151 and 155.

⁵ Editors' Note: Again, Mr. Harvey submitted to us a transcript of the letter he received in September 2000 from Mrs. Klopfenstein. Once again we feel that his text adequately covers its contents.

a prominent one, in the history of transportation in northwest North America. He was in fact a giant in the construction of railways anywhere. It has always been the people - the individuals - who have interested me most when writing about the wonderful history of the province of British Columbia, and there has been no lack of characters.

William Mackenzie and Donald Mann were an intriguing pair, for example. Entrepreneurs and builders - some referred to them as "operators close to the wind" - but they built Canada's first railways, although some of them only on paper. Then there were these great sternwheeler captains and owners, William Moore and John Irving. Who could ask for men more enterprising than they? The list grows to include Walter Moberley and Joseph Trutch, Colonel Moody and Governor Douglas, William Van Horne and Major Rogers, Jim Hill and Andrew McCulloch and, of course, Andrew Onderdonk and Michael Haney. These were men to admire and I found great pleasure in writing about them.

I must say that I have little patience with people who say that they have no interest in the past and that they are only interested in the present. These are people who do not know that they are but a leaf from a tree - and you can learn a great deal from that tree!

Michael Crichton says in one of his books:

The past has always been more important than the present. The present is like a coral island that sticks out above the water, but is built upon millions of dead corals under the surface that no one sees.

In the same way our everyday world is built upon millions and millions of events and decisions that have occurred in the past, And what we add in the present is trivial.

In any case, I think people should buy more books about history!

Finally, I would like to include an extract from one of my books. But, before I do this, I think I should say a few words about the area and the highway to which it relates, for the benefit of those who are not familiar with British Columbia.

It is about the road between Prince George and Prince Rupert in central B.C.. When I went up to Prince George as regional highway engineer in 1958, it was called the Northern Trans-Provincial Highway. Later it was extended to the Yellowhead Pass at the province's eastern boundary and renamed the Yellowhead Highway. When I arrived in my new job, it was 450 miles of trouble. It was paved for only a few miles on either side of the major centres, which were an average of 100 miles apart. In summer it was dust, and in winter it was mud - except when it was frozen solid and covered in snow. During the spring thaw, large sections became impassable due to mud, and some parts of the roadway were even *planked*. Highway maintenance was a challenge in these days!

Reconstruction of the highway had begun some months before I got there, and I am pleased to say that, when I left the region in 1967, it was almost all totally reconstructed and paved. You could drive that highway comfortably at seventy miles an hour - and you still can (if you avoid the RCMP!). In 1958 you would be lucky if you made thirty miles an hour.

The extract is a shortened and partially edited (by the author) version of the text that appeared on pages 84 and 85 of *Carving the Western Path by River, Rail and Road Through Central and Northern B.C.* It is about a small section of the highway between the towns of Terrace and Smithers, from Terrace eastwards to a small hamlet called Cedarvale. This was one of the worst stretches of the old road, and one of the last sections to be paved. It is entitled.....

A Light by the Door at Cedarvale

It was a road that nobody loved in the 1950s, and most of the 1960s - a twisting, winding snake through a narrow, steep-sided mountain valley. Forty-five miles of dust in summer, and shadowed ice and snow in winter - the Terrace to Cedarvale stretch. The only logic to its alignment when it opened in 1944 was that it took the easiest path - and that was not the straightest!

As British Columbia's northern trans-provincial highway was steadily improved from Prince George westward after the last war, the pavement slowly crept towards tidewater - but the Terrace to Cedarvale stretch saw neither hide nor hair of a paving machine for over twenty years.

This narrow slash through the dense forest carried the only road from Prince Rupert and Terrace to the rest of British Columbia. As the area awakened in the last years of the 1950s, with the advent of Kitimat, inter-regional road traffic was encouraged by the improvements and road paving from Smithers eastwards. Prior to that all traffic to the area was by ship, air or rail.

Travelling salesmen, and the odd civil servant, now tried driving from Prince George to Prince Rupert and back again, and they did this even in winter. On their return trip, if they left Prince Rupert in the morning, and made calls in Terrace after lunch, it was already darkening when they drove east over the Terrace to Cedarvale stretch. Smithers was the goal for overnight and there was absolutely no settlement at roadside from Terrace to Cedarvale. The Grand Trunk Pacific Railway planners had ensured this when they built their track on the other side of the Skeena River in 1911.

What the weary traveller craved to see, as the long miles dragged by and the roadside snowbanks crowded in, was the lights of Cedarvale, the first human habitation alongside the road in forty-five miles. The lights of the Cedarvale café and gas station were always on. When he saw them, the tired motorist could only murmur quietly, "Thank God!"

The coffee was always hot, and the news of road conditions and weather always true. Even at four in the morning the motorist in need of aid found a light on by the door, and a knock always brought someone.

Cedarvale started off as a Christian village named Miniskinish. Robert Tomlinson, the missionary who founded it in 1887, and nurtured it so carefully, must have been warmed when he looked down from Heaven and saw the benevolence that it brought to this corner of Canada's north west, seventy or eighty years later.

But progress was on the way and, as the 1960s ended, the trees were cut back and the forest no longer crowded in. The road grade was widened and lifted, and snow banks never formed thereafter - for one reason, because the high speed snow plow trucks rolled quickly on the new asphalt surface and blasted the white stuff far back in the wide right-of-way. Cars sped by rapidly, even in the worst of winter weather, and certainly in time of darkness. Most of the drivers never noticed the café and gas station by the grove of cedars.

An era had come to an end, and there was no more need for the light by the door at Cedarvale.

**Finally, Some General Comments.....
.....to help budding engineer/authors**

Be careful with the publisher you choose and the contract you sign. Some publishers are only interested in obtaining the grants for historical works from the various governments and will hand over your book to a distributor, at a reduced royalty to you. Distributing companies often deal only with certain bookstores and, if your publisher is disinterested, people might have difficulty getting your book.

Be careful about photograph captions. Often you are not given enough time to check them. Book designers will not touch text, but some feel they have a free hand with captions to arrange the photographs better on the page. Be sure that you edit the final form, as omissions can be embarrassing. You are held responsible for everything that appears. Publishers often think they have a free hand with the covers. Some are reluctant to show promotional material on them to the author,

and errors appear.

Be wary in writing the introduction. In one of them, I made the statement to which a reviewer took exception because it was out of context. In the text later on, it was defensible - but not in the introduction - and not to that particular critic. Do not always assume that a reviewer will read carefully beyond the introduction!

Lastly, keep correcting everything you find wrong, right up to the last minute. Never assume that you will get another chance. When that plate hits the paper, it is unchangeable, and some errors will come back to haunt you.

Good luck!

APPENDIX

As noted above, transcripts of the two letters I received from Mrs. Buchanan and Mrs. Klopfenstein have not been included in this paper. However, the editors have asked that this present appendix should include transcripts of four of the reviews of my books that were included in the additional information submitted to them in amplification of the original text. They have also asked for the inclusion of the transcript of the report submitted by Sapper Turnbull to Colonel Moody in May 1862 and my comments on it, which were also in the additional information. In what follows, the Turnbull material precedes the four reviews.

Copy of the report by Sapper James Turnbull "for a waggon road through the defiles of the Coquihall (sic) towards Kamloops." The text has been left unedited and uncorrected. However, the italicized words and letters in parentheses have been added for the benefit of the reader, who also does not have the advantage of viewing the sketches. The originals are held by the Glenbow-Alberta Institute.

Camp New Westminster

May 1862

Sir,

according to instructions I have to lay before you the following report relative to the practicability of a line of waggon road through the defiles of the Coquihall Valley towards Kamloops:-

From Hope to point B. (See sketch) (*Point B is thought to be the confluence of Boston Bar Creek and the Coquihalla River*) by keeping close along the edge of the Coquihall, a waggon road may be constructed at very moderate cost; as the entire route (with very trifling exceptions) consists of Flats and Benches heavily clothed with good timber, - void of all swamps, etc., etc.,-

The portions marked b, c, d, and f, are the only portions where any difficulty exists; and these portions are merely narrow spurs of high benches which can be rounded with a little side hill cutting, quarrying, and partial blasting.-

The present mule trail would have been constructed at considerable less cost, had it been brought round these points in the first instance (immediately above H W M) instead of the Zigzag tortuous routes which has been adopted.-

The streams shown in sketch are small and can be crossed with very trifling bridges. Streams at points e & j are the largest, they will require bridges about 45 ft. in length.-

From Hope to point B, (a distance of about 21 miles) a waggon road 15 ft. wide could be now constructed at an average for about \$1800 a mile.-

At point B the valley suddenly narrows, the mountains ascends on both sides at an angle of about 45 degrees, and are well dotted with broken bluffs and precipices; notwithstanding however the general rugged character of the valley, a

waggon road could be constructed with tolerable ease, (up to point O) as there are many small flats, which could be taken advantage of; the Hill sides also, though steep and broken, are clothed with splendid timber, which would prove of great service in the construction of a road; as well as serve to add to its performance afterwards.

From point O to P, the valley becomes still narrower, partaking exclusively of the canyon character; rough wall of Vertical Bluffs, rise on both sides of the stream to considerable height, and so varied in altitude, as to render it impossible to evade them, which would be a series of the most expensive blasting.-

From Pt. P the valley narrows more abruptly, the bluffs become more formidable, and the receding mountains more vertical and broken, and continues in character the same up to point S (see sketch 2)-

Owing to the unbroken steepness of the mountain sides on either side of the valley (or rather Gorge) the snow is not allowed to undergo a gradual thaw, and melt away in streams through the various ravines and gorges, which are so numerous along the face of the most rugged mountain sides, but on the least thaw it slides down the precipitous slopes, with tremendous force, carrying with it, boulders, trees and glacier all of which are lodged in one huge confused site at the bottom of the gorge.

Owing to the formidable obstacles existing in the way of road building through the Latter pass, together with the continuous avalanche, it is my opinion that the route is decidedly impracticable, and stands no comparison with any of the other routes through the Cascades.

In addition to the above enumerated difficulties, the grade about point S would be very heavy, as the valley falls, with an abrupt and rapid descent for about 400 Yards, from pt. S, the valley is more open but not entirely free from snow slides, untill about mile N., when it becomes much wider and bounded by more sloping banks, the bottom of the valley is covered, with a heavy growth of timber, consisting of Cedar, White Pine, Hemlock and Balsam, the hillsides are also clothed with similar growth; the character of the valley continues the same up to point t, it then narrows for about a quarter of a mile, and is filled up with piles of snow, glaciers and shattered trees, which have been deposited there by the avalanches which are continually falling.

After leaving the latter canyon the valley again opens, and assumes the same character as between points S & T, until arriving at point U, which it again becomes a partial canyon, presenting the usual formidable difficulties; beyond this canyon all difficulties cease, the valley gradually opens as it approaches the summit when it terminates in the form of a beautiful Amphitheatre, ornamented with groups of fine timber, and surrounded by low sloping hills, also covered with a fine growth of timber.

The following remarks are relative to the valley shown in the sketch stretching toward the east from point C; (*Point C is thought to be the confluence of Dewdney Creek and the Coquihalla River. For this and Point B, see the map on page 121*)

of Carving the Western Path...Through B.C.'s Southern Mountains) for the first 5½ miles the valley is highly favourable for a line of waggon road, its bottom is wide and heavily timbered, with an excellent growth of cedar & fir, and
(undecipherable).....cotton wood, vine maple and berry bushes grow in great profusion.

At point Z the character of the valley suddenly changes presenting formidable obstacles on all sides; it becomes narrow and bounded on either side by steep towering mountains, from the summits of which tremendous slides are continually falling.

At point b it turns sharply to the south and terminates abruptly as described on sketch.

From the summit of the mountain G,H,J (see sketch I.) Which is amongst the highest of the cascade range, I obtained an extensive view of the surrounding country, and could plainly trace the course of the valleys shown in the accompanying sketch; and as these valleys all terminate abruptly, I am perfectly confident that there cannot be any pass, suitable for a line of waggon road, between the head of the Coquihall (shown in sketch) and the Nicallaown river (*Nicolum Creek*).--

(Signed) J. Turnbull
Sapr. R.E.

To Col. Moody R.E.
C C Lds. & Works⁶

The following are comments on the above by the author:

This report was sent to me by R.C. Harris, and I wish I had received it before I wrote *The Coast Connection* - and that I had had it when I was making decisions in 1978! It would probably not have led to a rejection of the route, but it certainly would have helped in planning and designing that highway. Not that I did not have excellent advice and documentation from the planning, soils, and location branches, but this report conveys a feeling for the terrain that the others do not. It is so clear, so literate, and so relevant, that I can hardly believe that it was written by a *sapper*, and something in it convinces me that he did write it.

This report fully supports the contention that the Royal Engineers in B.C. in the 1860s were a hand-picked contingent, as British Foreign Secretary Sir Edward Bulwer-Lytton said they were! Harris also sent me the sketch plans: unfortunately they are poorly reproduced. Turnbull recommends against a wagon road by this route, mostly because of the avalanche hazard by Boston Bar Creek valley, but also

⁶ Col. Moody's full title was: Chief Commissioner of the Department of Lands and Works of Her Britannic Majesty Queen Victoria's North American Colony of British Columbia.

because of the instability of the upper canyon of the Coquihalla, a very accurate assessment. We decided to take on the avalanches in Boston Bar Creek valley. We did not go by the upper canyon either.

What this tells the engineer-author is that, before he ventures into the recording of transportation history, he should seek out all that is available in documents from the past from every source. This report was not found in B.C.'s archives; it came from those of Alberta, in which reposed the papers of Edgar Dewdney. It also tells him that the relevant part of his manuscript should be sent out to an acknowledged expert for the checking of its contents before publication. I knew that Harris was an authority on these trails and I should have sent him Chapters 1 and 2 of *The Coast Connection* before it went to publication. I feel certain he would have sent me the Turnbull material at that time, and he probably would have given me the same list of inaccuracies that he told me about after it was published.

Transcript of the review of the book The Coast Connection by Bob Griffin, the Curator of History at the Royal British Columbia Museum in Victoria, B.C., as contained in the February 1997 issue of the Victoria-based magazine Discovery.

Title of the Review: On the Road Again

Text:

Roads had a different meaning for people 100 years ago than they do today. In the 19th century, travelling on roads was much slower, much less reliable than on railways or water and often used only when no other method was possible. Before the CPR arrived on the coast in 1886, the Cariboo Road was the only connection to the interior. But the railway supplanted it, it fell into disrepair, and it was nearly 40 years before another road to the interior was built.

In *The Coast Connection*, R.G. Harvey examines the history of road construction in B.C., tracing the efforts of roadbuilders and those who maintained and improved them. He also documents the lack of good planning, the attacks of the Good Roads Association on the government of the day, and the follies of politicians and contractors. He supplements the text with maps, brief biographies and photographs, making this book an excellent starting place if you want to know something of the main highways on the mainland.

The Coast Connection is almost two books in one. The first half documents politics and road-building. It is well done, but sometimes lacking in detail. The second half is nearly a reminiscence of the author - a long-time Ministry of

Highways employee, who rose to the senior rank of deputy minister. Under the guise of history Harvey presents his views of post-war highway developments.

He admires Phil Gaglardi, who while not crooked, certainly skated close to the edge at times. He condemns Dave Barrett, seemingly because his NDP Government of the early 1970s overturned the previous government's programs, which were inspired by black-top politics. He ardently defends the Coquihalla Highway.

Harvey's slant on recent history does not make his book bad or uninteresting. Indeed, I was hard pressed to decide which half I liked better. The whole book is well written and makes interesting reading.

Transcript of the review of the book The Coast Connection by T.D Regehr, which appeared in the Canadian Book Review Annual of 1995.

Text:

R.G. Harvey, a professional engineer and road builder, describes in layperson's language the construction of overland trails and roads in British Columbia. He clearly explains the impact of the gold rush on the construction of mule and wagon roads. One of his most important contributions is his explanation of how the transcontinental railways were allowed to use and destroy the difficult and expensive wagon road that ran through the canyons of the Fraser and Thompson Rivers. Railway construction obviously had priority over road building before World War I. Harvey also has sharp words for Premier Vander Zalm and others who criticized the cost overruns and construction practices in the building of the Coquihalla Highway.

Road construction has always faced exceptional challenges in British Columbia. These obstacles have not only been geographical and technical in nature, but also political, financial and administrative. Harvey makes effective use of maps in discussing the various problems as well as the solutions to them proposed by the road builders. Readers who lack a detailed knowledge of British Columbia's various mountain ranges and passes may find some of the geographical descriptions difficult to follow.

This book will appeal not only to professional road builders but also those with an interest in history, politics, and economics. Waterways and railways have long intrigued Canadian historians. *The Coast Connection* should extend that interest to our nation's roads and highways.

Transcript of the review of the book Carving the Western Path By River, Rail and Road Through B.C.'s Southern Mountains as put out in Amazon.com on the Internet. The reviewer is identified as boniface.

Text:

Harvey describes in considerable but not tedious detail the factors that led to the past and present transportation corridors in southern British Columbia spanning a period from the mid-nineteenth century into the second half of the 20th. Every citizen should be familiar with the shenanigans of the big corporate and government interests that retarded transportation development and settlement and livelihoods of the ordinary working people in this part of the west. This account is a good start. The author takes us into the stupid and expensive competition between the early railroaders and the steamboat companies, and the struggle to build roads across the land from east to west. He describes the immense difficulties in creating east-west transportation links across a rugged land of north-south valleys, and terrible mountain passes. Given the love/hate relationship that many westerners have with the big railroad interests, Harvey debunks the legends of some of the construction personalities, including the Americans J.J. Hill* and W.C. vanHorne. He is critical of the short-sighted company and government decisions that led to great inconvenience and delays in development of the interior and northwest that lasted decades. Clearly a fan of the Sternwheelers, he dwells on their charms and gives a clear sense of the romance of travelling the interior lakes, and on the Columbia, Fraser, and Kootenay rivers. He gives us an implicit warning here too, of the dangers of applying yesterday's technology to tomorrow's transportation needs. Harvey knows his stuff, at least partially a result of his long time employment in government Public Works. He has included maps, fascinating photos, good chapter notes, a bibliography, and an index in this well-edited book. The volume is written for the general reader in B.C. and western frontier history, and is recommended for those old enough to remember nothing but dusty gravel roads in the west, youth who think highways and railways have always just been there, rail and steamboat fans, and anyone who wonders why the northern Pacific coast is the way it is! This was an excellent historical read, very entertaining and hard to put down. Together with its companion volume, *Carving the Western Path By River, Rail, and Road Through Central and Northern B.C.*, Harvey has written a very good 'popular history' account of the coming of modern transportation and its enormous effects on settlement and industry in the far west.

* Editors' Note: *Although J.J. Hill spent most of his working life in the United States and died there in 1916, he was born in the province of Upper Canada in 1838.*

Transcript of the review of the book Carving the Western Path By River, Rail, and Road Through Central and Northern B.C. as put out in Amazon.com on the Internet. The reviewer is identified as boniface.

Text:

Like Harvey's previous and companion volume *Carving the Western Path By River, Rail, and Road Through B.C.'s Southern Mountains*, this is an entertaining, informative and stimulating read. Here he deals with transportation development along the upper Fraser River, the Peace River, and basically everything in the northern half of British Columbia. This is a book about how paddlewheel steamers, railroads, and finally highways came to be in this vast and remote northwestern part of North America, making possible cities, ports, industries and travel in general. Particularly interesting were the sections covering the transportation demands of the Klondike gold rush of 1897-98, and the amazing effort during World War II that resulted in the building of the first road to Alaska through northern Canada. The author includes the effects of telegraph construction and early aviation on development as well. This is a story that encompasses rogues and heroes, silly politicians, and people of courage and vision; a few famous and most not. There is humour too, especially in the pipe-dreams of a few, such as the proposal to build a monorail up the Rocky Mountain trench. The author is very familiar with his material, and has a pleasant sympathy for the native people, the railway workers, and the transportation needs of the miners, settlers, farmers, and the common people of the times. As in the earlier companion book, Harvey has included good documentation, and both are written in an easy-going style, have a nice clear typeface for those whose eyes are aging, and contain a number of helpful maps and information boxes that work well. As in the previous volume, there are a lot of great period photos here! Though not strictly necessary, the reader should strongly consider getting and reading both volumes, as I did. Separate or together, they are an excellent immersion into a little-known aspect of the history of the west.

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R.G. Harvey's books may be obtained from the following sources:

The Coastal Connection, (ISBN 0-88982-130-5) was published in 1994 by Oolichan Books of Lantzville, B.C. but is now distributed by General Publishing Division Services, 325 Humber College Blvd., Toronto M5W 7C3. (Soft cover: \$17.95)

Carving the Western Path By River, Rail, and Road Through B.C.'s Southern Mountains (ISBN 1-895811-62-7) and *Carving the Western Path By River, Rail, and Road Through Central and Northern B.C.* (ISBN 1-895811-74-0) were both published (1998 and 1999) and are distributed by Heritage House Publishing Company, 108-17665-66A Avenue, Surrey, B.C. V3S 2A7 or <distribution@heritagehouse.ca> (Soft covers: \$18.95 and \$16.95)