Workers’ sacrifice: the construction of Colombia’s railways

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In the industrial countries of the 19th century, the train symbolised all that was modern: a rich network of iron pathways linking one town to another, undermining the supremacy of the horse. In 1850, Latin America accounted for only one twentieth of the world’s railways, but by the outbreak of the First World War, that figure had risen to over 22 per cent. Such technical achievements, however, were built on the back of hard labour and came at a high human cost – particularly in Colombia.

Colombia’s first railways

Colombia emerged as a republic at the beginning of the 19th century after gaining independence from the Spanish Empire. During the first half of that century, the country’s economic foundation rested mainly on two things: mining and agricultural output from farming. Links to international trade were weak owing to poorly developed domestic markets, few means of communication, the dominance of unwaged production and the low productivity of the workforce.

The national elites were aware of the changes that industrialisation was bringing to European countries. They succumbed to pressure for an international division of labour that would position Colombia as an exporter of agricultural produce. Throughout the century, there were various bonanzas in tobacco, indigo and vegetable ivory⁴, until coffee became established as the chief export. In 1870, the working population chiefly comprised arable farmers, cattle farmers and fishermen (71.4 per cent), followed by craft workers and manufacturers (10.4 per cent), servants or domestic workers (8.3 per cent), traders and muleteers (3.7 per cent), and miners (2.3 per cent).
The high human cost of the Panama Railroad

The construction of the Panama Railroad to make crossing the Isthmus of Panama (a strip of land between the Caribbean Sea and the Pacific Ocean) an easier process was the world’s fourth completed railway construction project. The conditions faced by the workers were even more challenging than those later encountered in the construction of the Panama Canal. Both projects cost the lives of thousands of workers, but the railway is less familiar to the general public than the canal. The railway was completed in a record time of five years, between 1850 and 1855.

The pioneering initiative was linked to the conquest of the North American West. The discovery of gold in California in 1848 sparked a “gold fever”, and in less than 10 years, 300,000 people had migrated to California. At the time, the transcontinental railway in the US was yet to be completed. One of the alternative routes was a 120-day sea voyage around the coasts of the American continent, from the North Atlantic to the Pacific, via the tip of South America, Cape Horn. One way of shortening the voyage was to travel by sea from New York to Chagres, on the Atlantic coast of Panama, cross the region in three to four days using a 300-year old road, and to board another ship from Panama City to California. This complex trip would cut the journey time to California to 60 days.

In order to make the journey across Panama shorter and easier, the Panama Railroad Company, based in New York, began building the first Colombian railway in August 1850. It would cross only 75 kilometres of terrain, but those 75 kilometres included tropical jungle. A huge number of workers were involved, from Cartagena (Colombians), Europe (Irish, Italians, Germans and Portuguese), and the West Indies (Jamaicans and Martinicans), as well as slaves from Africa, but the bulk were from China and India. Sometimes recruited under false pretences, they worked in conditions of semi-slavery. Contemporary records note inhuman working conditions. The navvies frequently worked in chest-deep water or in torrential downpours. Most of them had no means of identification, and the company did not keep detailed records, so there are no data even on the number of deaths that occurred, although estimates put it at between 6,000 and 12,000.

In addition to the high accident rate, workers suffered from conditions such as yellow fever, malaria and cholera – tropical diseases that would also beset the construction of the Panama Canal, although at the time of the railway construction, knowledge of how to control them was even poorer. Health became one of the company’s major challenges for two reasons: first, in order to persuade people to accept employment as construction workers; and second, to keep enough of them alive to complete the project successfully. As a result, health services became an integral part of the project, although access to hospitals and clinics was not equal for direct employees and contractors, and there was blatant racial discrimination. Workers of Chinese origin had high suicide rates; they were also reluctant to use western health services, placing greater trust in traditional Chinese medicine.

The construction of the Panama Railroad was completed in January 1855 at great human and economic cost. After it opened, it generated enormous profits for investors because of the high numbers of passengers and amounts of freight it transported at high prices, at least until the Panama Canal became operational half a century later.

Workers’ health in Colombia’s many railway projects

Despite the weakness of the Colombian state finances in the nineteenth century, which had deteriorated further as a result of the internal wars that erupted during the period, a further 13 railway projects were promoted. The aim was to overcome internal communication difficulties and to facilitate the trade in exports and imports. Colombia’s colonial inheritance was a fragmented territory: the country had a dispersed population, its main cities were high in the Andes Mountains, and there were extensive areas of unexplored jungle in the Andean mountain valleys. The railways were pushed as a means of creating a communications network. Given the difficulties of the topography and the economy, the first choice was to attempt to connect each region to the Magdalena, a river that crosses the country from south to north, used as an important communications route since colonial times.

1. Vegetable ivory, or tagua nut, is extracted from the fruit of an Amazonian palm tree. It has long been used to make clothing buttons.
2. When work began, around 400 Irish workers were hired in New York, but the poor conditions quickly cost many of them their lives, leading over 100 of them to go on strike. The company responded by cancelling their contracts and sending them back to New York.

Sometimes recruited under false pretences, they worked in conditions of semi-slavery.
The railway construction projects can be divided into three groups. First, the projects that sought to connect the Magdalena River to the Caribbean Sea, where the main ports were located: the Bolívar Railway between Barranquilla and Puerto Colombia, which was begun in 1869; and the Cartagena Railway, between Cartagena and the Magdalena River, begun in 1890. This region was also the location of the Santa Marta Railway, which played a different role, as its chief function was to transport bananas from the area controlled by the United Fruit Company – known for the massacre that occurred in the 1920s, as referenced by the Nobel Laureate for Literature Gabriel García Márquez in his masterpiece One Hundred Years of Solitude.

A second group comprises the projects to connect the Andean cities to the Magdalena River. These include the La Dorada Railway between the towns of La Dorada and the tobacco-growing area of Ambalema, begun in 1872; the Antioquia Railway between the cities of Medellín and Puerto Berrio on the Magdalena River, begun in 1874; the Puerto Wilches Railway between Puerto Wilches and the city of Bucaramanga in the east, begun in 1881; and the Girardot Railway, also begun in 1881, which aimed to connect Girardot, another town on the upper reaches of the Magdalena River, first to the town of Facatativá, and from there to Bogotá via the Sabana and Cundinamarca Railway, and secondly to two branchlines, one to the city of Neiva and one to the city of Ibagué, as part of the Tolima-Huila Railway begun in 1893.

The third group of projects covered other locations and had a regional emphasis, for example the Pacific Railway connecting the port of Buenaventura on the Pacific coast with the city of Cali, begun in 1882; the Cúcuta Railway in the north-east of the country extending to the border with Venezuela, on which construction began in 1882; and finally the Northern and Southern Railway lines (1889 and 1895 respectively) linking each of those two areas to Bogotá.

These projects share some similarities with the construction of the pioneering Panama Railroad, but there are also some differences. They occurred under the protection of legislation that imposed a limited number of requirements on investors as well as providing for significant benefits such as land grants, favourable tax arrangements, and special privileges including a monopoly over transport, supported on occasion by the misappropriation of public funds. From a financial point of view, their development was leveraged by finding foreign investors (chiefly from the UK and the US), with support from the Colombian state and, in some cases, direct state investment. Where technical matters are concerned, like the execution of the works, responsibility for the preliminary studies lay with...
foreign experts, although participation of Colombian engineers grew steadily. A high proportion of the materials used were imported (especially rails and machinery).

Texts on the history of the construction of the Colombian railways in the 19th century devote little space to the workers. Initially, foreign workers were involved in railway construction, but generally they were far fewer in number than was the case for the Panama project. The process generally began with geologists drawing up the plans, and was followed by logging, the raising of embankments and the construction of bridges and tunnels, the production and placement of girders, the laying of rails and the operation of locomotives. This entire process was supported by transporting materials by mule, the construction of stations and the development of activities to meet workers’ needs for accommodation and food. Although the contracts and rules in force at the time placed the construction companies under no obligation to provide medical care, it was nonetheless part of the projects, mainly because the foreign workers demanded it and it incentivised recruitment among Colombian workers, who were reluctant to be part of projects that crossed disease-ridden areas, especially in the jungle skirting the Magdalena River.

Reports reveal the gruelling working conditions: 10-hour days in a harsh climate under the foremen’s strict control. The camps were devoid of any sanitation whatsoever. There were frequent reports of snake bites, various kinds of accidents, and non-specific diseases blamed on miasmas. No registers were kept of the deaths, and since many of the workers had no next of kin, in the main their deaths went unremarked by the outside world. Where medical services were concerned, at first they merely involved tending injuries and caring for the sick, but over time they took on a broader public-health role.

There is a record of a strike in November 1878 by the Pacific Railroad workers demanding better working conditions, which may be related to the major strike movement among US railroad workers in 1877.

The emergence of a new age for labour

The development of train transport incorporated technologies previously used in mining (such as the use of travelling wagons on wooden supports) and in steelworks (the use of rails) – in particular, use of the steam engine, which meant having energy available that could gradually increase the speed of travel. This changed people’s experience of space and time and encouraged the enlargement of internal regional borders, market integration and the distribution of goods, all of which drove expansion of industrial output.

For the working population involved, the project exacted a high toll in human lives and health. But it also led, by necessity, to new means of organising labour – faced with a management that increased the pace of work and the length of the working day – and kindled the first glimmers of proletarian struggle that would burn more brightly in the first few decades of the 20th century.

The law at the time contained no rules on health and safety for the working population, and health and safety was not a matter covered in the public railway construction contracts. However, the railways did see the development of some worker-focused services, although there was significant discrimination between direct employees and the majority who were employed through contractors.

The construction of Colombia’s railways in the 19th century thus made a significant contribution to the definition of occupational health as a field of medicine, something which would then benefit a significant number of workers across the country.